

Strategic Defence Review



**Presented to Parliament by the
Secretary of State for Defence
by Command of Her Majesty**

July 1998

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STRATEGIC DEFENCE REVIEW

MODERN FORCES FOR THE MODERN WORLD

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STRATEGIC DEFENCE REVIEW

INTRODUCTION BY THE SECRETARY OF STATE FOR DEFENCE THE Rt. Hon. GEORGE ROBERTSON MP



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1. The British people are rightly proud of their Armed Forces. They want, indeed expect, the Government to provide strong defence. The Strategic Defence Review does just that. By modernising and reshaping our Armed Forces to meet the challenges of the 21st century, this Review will give our Services the firm foundation they need to plan for the long term.
 2. The Review is radical, reflecting a changing world, in which the confrontation of the Cold War has been replaced by a complex mixture of uncertainty and instability. These problems pose a real threat to our security, whether in the Balkans, the Middle East or in some trouble spot yet to ignite. If we are to discharge our international responsibilities in such areas, we must retain the power to act. Our Armed Forces are Britain's insurance against a huge variety of risks.
 3. While the Review will lead to a fundamental reshaping of our forces, I have ensured that it is firmly grounded in foreign policy and sound military experience. It builds on the strengths of our people as well as our long and distinguished military traditions. This mixture of radical change and solid planning has been fused through a process of wide consultation to produce a package which has the wholehearted support of the Service Chiefs of Staff. I too am confident that the Strategic Defence Review will give them the tools to do the job.

4. At the heart of the Review is a series of initiatives across defence to co-ordinate the activities of the three Services more closely, pooling their expertise and maximising their punch, while at the same time eliminating duplication and waste. The most important of these tri-Service "Joint" approaches is the new Joint Rapid Reaction Forces, which will be the spearhead of Britain's modernised, rapidly deployable and better supported front line.
5. As the result of a historic proposal from the First Sea Lord and the Chief of the Air Staff, the Royal Navy and Royal Air Force will build on the success of recent operations in the Gulf and co-operate to develop a new Joint Force 2000. The RAF and RN Harrier jets of this force will be able to operate equally effectively from aircraft carriers or land bases. We will also bring together our battlefield helicopters under a single command, and expand the responsibilities and role of our Chief of Joint Operations.
6. In the post Cold War world, we must be prepared to go to the crisis, rather than have the crisis come to us. So we plan to buy two new larger aircraft carriers to project power more flexibly around the world. New transport aircraft and ships will move our people and equipment rapidly to troublespots.
7. If we ask our forces to fight, we must be sure they will win. That means we must correct the deep-seated problems we inherited from the previous government, most obviously in the medical and logistics areas, to ensure that our forces are properly supported. Past cuts in support have been presented as "trimming the tail without blunting the teeth". The reality is that logistic support is the life-blood of the forces, and we must ensure that our forces get the back up they need.
8. At the same time we must focus our effort on the capabilities we need to be successful today. That will mean reductions in some areas which were needed primarily to meet Cold War threats. So we will place somewhat less emphasis on open ocean anti-submarine warfare and have fewer tanks and fast jets in the front line. We will retain our nuclear deterrent with fewer warheads to meet our twin challenges of minimum credible deterrence backed by a firm commitment to arms control. We will also radically reorganise our procurement and logistics organisations to spur efficiency and drive through best business practice. Then we will use the headroom we have generated to ensure that we have the forces we need to meet the new challenges.
9. Our Reserve Forces must also adapt to the new world. We must make our Reserves relevant and usable by integrating them more closely with regular units and improving their training and specialist skills so that we can deploy them more easily on operations.
10. We should also have a weather eye to the much longer term. Technology is likely to race ahead. It will pose new threats and challenges, such as systematic attacks on computer networks. We must work closely with our Allies to counter these problems. Yet technology may

also open up radically new ways for our Armed Forces to operate. Again, we are alive to the possibilities and will work closely with our Allies to ensure that we reap the maximum benefit from such change.

11. This is a massive agenda for change. To design it we have drawn on the skills of all of our people in what I believe is the most open and inclusive defence review ever conducted. Hundreds of experts from within the MOD, the Armed Forces and elsewhere have given a great deal of time over the past year to produce the most significant reshaping of our Armed Forces in a generation. I am very grateful to all of them for the time, energy and ideas they have so generously given.

12. It is absolutely right that we should have consulted so widely; we need to harness the enthusiasm of all of our people to implement these changes and set defence on to a positive road once more. People throughout the Armed Forces have a very large stake in that future, and I have tried to take on as many of their ideas as possible. After a decade of cuts and drift, our people are looking for a positive vision for the future of the Armed Forces, and I believe the Review delivers that.

13. All too often in the past the importance of people in delivering the results we want has been ignored. All three Services have been overstretched because of the demanding pattern of our operations, and I am determined to put that right.

14. We also need to attract and retain the brightest and the best of our young people. To achieve that I intend to expand dramatically the educational opportunities open to members of the Armed Forces, both while they are serving and after they leave the Services. My "Learning Forces" initiative, tied into the Government's "Learning Age" proposals, will give our young people the skills they need to make the best possible contribution to the Armed Forces, and equip them with the transferable qualifications they want once they return to civilian life.

15. We ask our people to do difficult and dangerous jobs, and many of them regularly put their lives on the line. It is therefore right that we should provide them with the best possible equipment. Led by projects such as the world-beating Eurofighter, we will completely overhaul the equipment used by the forces over the next decade. That will be good for our people, and good for Britain's defence industry.

16. To complete this ambitious programme we must apply modern management methods to ensure that we deliver results as efficiently as possible for the taxpayer. Indeed, the continuing push for greater efficiency is an integral part of our plans to drive down costs to pay for the modernisation of our forces. To assist the process we will establish a tri-Service Chief of Defence Logistics, who will be responsible for delivering best business practice throughout our support services. This is another huge change for the Ministry, which will allow us to co-ordinate and standardise our support services properly for the first time.

17. We are also determined to introduce the best of modern commercial management techniques to the procurement of defence equipment. Too often in the past our new equipment has been too expensive and delivered too late. That is why, as part of the Review, we asked a team from industry, the Services and the consultants McKinsey to study the best ways to learn from companies in areas as diverse as oil exploration and car production, in our search for better ways to provide equipment. Their conclusions will lead to a fundamental overhaul of our procurement processes in my Smart Procurement Initiative.

18. Underpinning the changes to our forces is our reinforced international commitment. NATO will continue as the cornerstone of our defence planning, and we intend to build on our role as a leading European member of the Alliance. Our commitment to the United Nations, through our permanent membership of the Security Council, is also strengthened. We support efforts to help make the UN a more effective tool in resolving international problems. We are also prominent members of the OSCE and the WEU.

19. The British are, by instinct, an internationalist people. We believe that as well as defending our rights, we should discharge our responsibilities in the world. We do not want to stand idly by and watch humanitarian disasters or the aggression of dictators go unchecked. We want to give a lead, we want to be a force for good.

20. That is why the Government is committed to strong defence, and sound defence is sound foreign policy. As Kofi Annan, the UN Secretary General, said "You can do a lot with diplomacy but, of course, you can do a lot more with diplomacy backed up with firmness and force". It is my strong belief that the Strategic Defence Review will deliver Modern Forces for the Modern World which will enable Britain to achieve a "lot more" in the 21st century.



Ministry of Defence

July 1998



CHAPTER ONE

A STRATEGIC APPROACH TO DEFENCE

1. The publication of this White Paper fulfils the Government's manifesto commitment to conduct a foreign policy-led strategic defence review to reassess Britain's security interests and defence needs and consider how the roles, missions and capabilities of our Armed Forces should be adjusted to meet the new strategic realities.

New Strategic Realities

2. The strategic environment we face today is very different to that of the previous fifty years. The risks and challenges we face are not simply those of the Cold War minus the threat from the Warsaw Pact. It is both better and worse than that.

3. On the positive side, the collapse of Communism and the emergence of democratic states throughout Eastern Europe and in Russia means that there is today no direct military threat to the United Kingdom or Western Europe. Nor do we foresee the re-emergence of such a threat. But we cannot take this for granted. It is therefore a vital British interest that these trends should strengthen and not go into reverse.

4. Our defence policy and activity must contribute to consolidating these welcome changes and thus enhancing our security. The admission of three new democracies to NATO is a major step on this path. But we are determined that this should not lead to new divisions in Europe. NATO's Partnership for Peace and our national programme of bilateral defence co-operation have key roles in promoting and developing constructive security relationships between all the nations of Europe.

5. On the negative side, however, there are new risks to our security and our way of life.

6. During the Cold War, the East/West confrontation dominated strategic thinking in a way that produced a misleading impression of stability in large parts of the world. In part this was because that confrontation temporarily suppressed underlying tensions and problems. In part,

it was because the scale of the risks involved in the Cold War obscured the potential importance of the newer style of security risks that were emerging.

7. Instability inside Europe as in Bosnia, and now Kosovo, threatens our security. Instability elsewhere - for example in Africa - may not always appear to threaten us directly. But it can do indirectly, and we cannot stand aside when it leads to massive human suffering.

8. There are still very dangerous regimes in the world. Some are well armed with conventional weapons and their armouries assume greater significance as democratic countries reduce their armaments. There is an increasing danger from the proliferation of nuclear, biological and chemical technologies. As Iraq has amply demonstrated, such regimes threaten not only their neighbours but vital economic interests and even international stability.

9. There are also new risks which threaten our security by attacking our way of life. Drugs and organised crime are today powerful enough to threaten the entire fabric of some societies. They certainly pose a serious threat to the well-being of our own society. We have seen new and horrifying forms of terrorism and how serious environmental degradation can cause not only immediate suffering but also dangerous instabilities. And the benefits of the information technology revolution that has swept the world are accompanied by potential new vulnerabilities.

10. The challenge now is to move from stability based on fear to stability based on the active management of these risks, seeking to prevent conflicts rather than suppress them. This requires an integrated external policy through which we can pursue our interests using all the instruments at our disposal, including diplomatic, developmental and military. We must make sure that the Armed Forces can play as full and effective a part in dealing with these new risks as the old.

Current Problems

11. It would be as wrong to take military success for granted in this new environment as it would have been during the Cold War. We have therefore taken a hard look at the capabilities of today's Armed Forces. The so-called 'peace dividend' from the ending of the Cold War has already been taken. Since 1990, defence expenditure has fallen by some 23% in real terms and our forces have been cut by nearly a third. Yet over this period we have faced a series of new and largely unexpected operational challenges. Our Armed Forces have responded outstandingly but they face serious problems that carry increasing risks in relation to the changed pattern of operations. There are personnel shortages in important areas, which with the high level of operational commitments are creating excessive and unsustainable pressures on many of our people. Other areas of weakness include the extent of our rapid deployment capabilities and our ability to sustain and support overseas operations, including medical support.

Looking Ahead

12. Defence planning is a long term business. Major equipments take years to develop and typically have lives of twenty five years or more. Events since the fall of the Berlin Wall - just nine years ago - show that the political and strategic world can change radically within such timescales. History reminds us that this can be for the worse as well as the better. Social and technological transformation has also been rapid and we can expect this to continue, affecting both our daily lives and the role of our Armed Forces over the next twenty years. We need to take account of such changes and exploit them wherever we can to ensure not only that our forces are as capable and cost-effective as possible but also that they continue to be valued by our society and to provide rewarding careers.

The Aim of the Review

13. Defence serves the aims of foreign and security policy. The Government's manifesto sets out a broad vision of Britain's role: strong in defence; resolute in standing up for our own interests and as an advocate of human rights and democracy the world over; a reliable and powerful ally; and a leader in Europe and the international community.

14. Defence can provide a wide range of tools to support these aims. The purpose of the Review was not only to meet the challenges of today's complex international scene but also to provide the flexibility to respond to those we may face well into the new century.

15. We cannot predict the future but if we are to meet it confidently we must have a clear long term view of our objectives and how we expect defence to contribute to them. The Review therefore considers our defence requirements in the period to 2015. We must also show our people that they are getting good value for money for what they spend on defence. For these reasons the Government wishes to achieve a broad national consensus on defence and has consulted widely in the course of the Review.

16. The Strategic Defence Review aims to provide the country with modern, effective and affordable Armed Forces which meet today's challenges but are also flexible enough to adapt to change. It provides a vision for the modernisation of Britain's defence into the 21st century. Its theme is 'Modern Forces for the Modern World'.



CHAPTER TWO

SECURITY PRIORITIES IN A CHANGING WORLD

17. Britain's place in the world is determined by our interests as a nation and as a leading member of the international community. Indeed, the two are inextricably linked because our national interests have a vital international dimension.

Interest and Goals

18. We are a major European state and a leading member of the European Union. Our economic and political future is as part of Europe. Our security is indivisible from that of our European partners and allies. We therefore have a fundamental interest in the security and stability of the continent as a whole and in the effectiveness of NATO as a collective political and military instrument to underpin these interests. This in turn depends on the transatlantic relationship and the continued engagement in Europe of the United States.

19. But our vital interests are not confined to Europe. Our economy is founded on international trade. Exports form a higher proportion of Gross Domestic Product than for the US, Japan, Germany or France. We invest more of our income abroad than any other major economy. Our closest economic partners are the European Union and the US but our investment in the developing world amounts to the combined total of France, Germany and Italy. Foreign investment into the UK also provides nearly 20% of manufacturing jobs. We depend on foreign countries for supplies of raw materials, above all oil.

20. Our economic interests and our history give us other international responsibilities. Over 10 million British citizens live and work overseas. We have 13 Overseas Territories spread around the world. We are members of many important international organisations and have developed close ties of friendship with countries in every continent. And as an open society, we are easily affected by global trends and other external influences.

21. Our national security and prosperity thus depend on promoting international stability, freedom and economic development. As a Permanent Member of the UN Security Council and

as a country both willing and able to play a leading role internationally we have a responsibility to act as a force for good in the world. We do not aspire to be a world policeman; many of our important national interests and responsibilities are shared with others, particularly our Partners and Allies in the European Union and NATO. We also attach immense importance to the international community as a whole working together through the many multinational organisations, above all the United Nations.

THE CHANGING WORLD TO 2015

22. The post-Cold War environment offers new opportunities to promote these goals and interests but also brings new challenges. And, over the period considered by this Review, there are potential longer term risks to be considered. Over this length of time, there will also be substantial change in the political, social and technological context in which our forces will have to operate. Again, there are opportunities to be exploited and risks to be guarded against. We need to face both with open eyes and recognise that they will bring further changes to our Armed Forces.

Opportunities

23. The end of the Cold War has transformed our security environment. The world does not live in the shadow of World War. There is no longer a direct threat to Western Europe or the United Kingdom as we used to know it, and we face no significant military threat to any of our Overseas Territories.

24. The improvement is political as well as military. The end of confrontation has revitalised international bodies and made the 'international community a reality. This is epitomised not only by the role now taken by the UN Security Council but also by the unprecedented international peace support operations in Bosnia which have involved 37 countries operating under a NATO umbrella, including Russia and other members of the former Warsaw Pact.

25. These changes have important implications for the shape of our forces. We do not at present face the threat of an air or other direct attack on this country. Nor do we need large standing forces on the continent or in the Atlantic simply to defend ourselves and our Allies. This has given us the opportunity both to reduce the scale of our forces and to employ them on a wider range of tasks in support of foreign and security policy but this also requires changes in the balance of our military capabilities. The process of restructuring our forces began in the early 1990s but, while the previous government was swift to cut defence expenditure by major cuts in Cold War capabilities, it did not invest adequately in the right capabilities to meet new demands.

26. The first requirement of our foreign and defence policy is to maintain and reinforce the

present favourable external security situation. We must consolidate the changes that have taken place in Eastern Europe. Our forces have acquired a new role in promoting our security through programmes designed to promote understanding and trust between all European armed forces and, in particular, to assist the development of modern, democratic forces in Central and Eastern Europe. Such defence diplomacy also has considerable utility in support of wider foreign policy objectives. The next chapter describes the Review's plans for increasing the emphasis we place on this aspect of defence.

Current Challenges

27. While we no longer face the threat to our national survival represented by the Warsaw Pact, today's security environment is not benign. This is reflected in the very high level of commitments in which our forces are currently engaged. These arise from a wide range of risks to our security and interests, including combating terrorism related to Northern Ireland. The Government believes that the Belfast Agreement provides the basis for a lasting political settlement. The Armed Forces have already responded flexibly in their deployment following the various ceasefires since 1994. The Government hopes that the level of threat from terrorism will reduce further and allow for reductions in the numbers of troops required to assist the civil authorities consistent with the level of threat, while maintaining normal garrisons as elsewhere in the United Kingdom.

28. While today's commitments are individually on a smaller scale than the Cold War threat, they are operationally demanding, especially in aggregate. At the beginning of the year, we had over 25,000 personnel on operations in Northern Ireland and overseas. This is not unusual. Over the last eight years many more British troops have been on active operations at any one time than during the Cold War. These have ranged from the Gulf War - which was by far our biggest operation since Suez - to the rescue of British citizens from a series of crises overseas. Before considering the implications for our Forces, we need to understand the factors that have contributed to this change.

Underlying Risks

29. For the last two hundred years, the dominant force in international affairs has been the nation state. Most wars have been caused by attempts to create or expand such states. In contrast, over the next twenty years, the risks to international stability seem as likely to come from other factors: ethnic and religious conflict; population and environmental pressures; competition for scarce resources; drugs, terrorism and crime.



A soldier from The Princess of Wales's Royal Regiment on patrol in West Belfast.

30. These pressures operate both within states and across borders. The break-up of states seems likely to be as much a security problem as traditional expansionism, although Saddam Hussein provides a powerful reminder that this should not be ruled out. Moreover, the consequences of initially local crises may spread dramatically in an ever more interdependent world.

31. Events in Bosnia illustrate this well, with a quarter of a million refugees fleeing to the rest of Europe. Even more worrying was the possibility that the war would ignite tensions over Bosnia's borders, drawing in other states. Overspill of this kind could lead to pressures which might weaken or undermine some of the new democracies in the region and even put at risk wider European security. Events in Kosovo emphasise the continuing dangers and the need to be able to mount a military response rapidly to contain crises before they get out of hand.

Impact of Social and Technological Change

32. Social and technological change are already having a huge impact both on the nature of the risks we face and our options for responding to them. Indeed, technology is a major force in social change worldwide. We can expect such change to continue and probably accelerate.

33. In military capability, we can look, for example, for much more precise application of force as a result of improvements in intelligence gathering, command and control and precision weapons. Equally, there is potential for practical and cost benefits in the way we train and support our forces. Such possibilities also raise difficult long term questions. How much should we invest in improving "enabling technologies" at the expense of weapon numbers? How can our equipment plans keep up with the pace of change? How do we and our Allies retain

interoperability with US forces given the radical changes they envisage? And will technological changes also require radical changes in the way our forces are organised and fight? We will be addressing these issues in the coming years.

34. Technological and social change will also open up broader possibilities which will have a profound effect on our future security. Many of these developments will be double-edged, bringing new vulnerabilities as well as opportunities. They include new ways of fighting such as information warfare (which attacks through the computer systems on which both our forces and civil society increasingly depend); greater pressures on operational decisions (instant media reporting from both sides of the front line); the wider spread of technologies which may be used against us (such as biological weapons); and highly sophisticated civil capabilities that will be readily available both for us and potential adversaries. And where we (and our Allies) exploit technology to strengthen our existing superiority in conventional weapons, our potential adversaries may choose to adopt alternative weapons and unconventional (or 'asymmetric') strategies, perhaps attacking us through vulnerabilities in our open civil societies.

35. While we cannot predict the detailed impact of such changes over twenty years, we have taken a hard look at how we can seek to make the most of emerging trends in all areas of the Review, including how to adapt our requirements and procurement processes so that we are not left behind by the speed of change.

SECURITY PRIORITIES FOR THE FUTURE

European Security

36. European security will remain fundamental to our national security and economic well-being. We must not take that security for granted. We need to work to preserve it, through strengthening international security relationships and responding to new risks of instability within Europe, as in Bosnia. We also need to preserve our capability to react should the political climate change for the worse.

37. Membership of NATO will continue to provide the UK with its best insurance against all these risks. This partnership between Europe and North America has been a uniquely effective political and military security Alliance for half a century. The fundamental purpose of defending the freedom of all its members remains as important as ever.

38. NATO has also shown it is highly relevant to the specific circumstances of Europe today. Militarily, NATO has been reinvigorated and has shown its continuing value by its role in Bosnia and its response to events in Kosovo. Politically, it has responded positively and imaginatively to the aspirations of the new European democracies. The planned admission in

1999 of three new members from the former Warsaw Pact is a welcome first step in a carefully managed process of enlargement which will strengthen both the Alliance itself and European security as a whole. NATO's Partnership for Peace programme and its Agreements with Russia and the Ukraine are also part of this positive approach to strengthening political and security relationships in Europe.



The Queen's Royal Hussars on patrol in a Challenger 1 main battle tank in Bosnia.

39. A wide range of other institutions also have major parts to play in the development and reinforcement of European security. The European Union has a vital role in helping to preserve and extend economic prosperity and political stability, including through the Common Foreign and Security Policy. The Western European Union has an important role in fostering defence co-operation amongst its members, in conflict prevention and, particularly, peacekeeping. Development of the European Security and Defence Identity within NATO will enable the Western European Union to carry out these roles more effectively. And the Government places high importance on the role of the Organisation for Security and Co-operation in Europe which embraces 54 states and is uniquely placed to contribute to building confidence and preventing conflict in Europe.

SECURITY PRIORITIES FOR THE FUTURE

Outside Europe

40. Outside Europe our interests are most likely to be affected by events in the Gulf and the Mediterranean. Instability in these areas also carries wider risks. We have particularly important national interests and close friendships in the Gulf. Oil supplies from the Gulf are crucial to the world economy. Confrontation in the Middle East carries the risk of escalation

and since the region borders on NATO, in some circumstances crises could involve the Alliance directly. The same is true, to a lesser extent, in North Africa. Although our direct interests in the region are limited, its proximity to the southern boundary of the European Union and NATO gives us a continuing stake in its stability.

41. There are already significant sources of instability in these regions - including the continuing threat represented by Saddam Hussein's Iraq. The size of the military forces available and the presence and potential spread of ballistic missiles, chemical and biological weapons and even nuclear weapons add to the risks. These dangers seem unlikely to diminish and may grow. Many of our Allies and Partners have similar important interests and friendships in these areas. We would therefore expect to work with them in responding to any future crises.

42. Elsewhere, although the risks to our specific interests are small, we have longstanding international friendships to maintain and we have an important wider interest in supporting international order and in promoting freedom, democracy and prosperity. Our international stature and position as a Permanent Member of the UN Security Council gives us a particular responsibility to contribute. Nor does the British public expect us to turn our back on poverty,

The Role of Defence

inequality and human suffering in poorer countries. We will respond to such problems as necessary drawing on the range of civil, diplomatic, economic and military means at our disposal.



Soldiers of The Princess of Wales's Royal Regiment make friends with children in Brazzaville whilst on standby with RAF Puma helicopters to evacuate British civilians from Zaire.

43. This chapter has considered Britain's security priorities in a changing world. Pursuing these priorities requires the combined application of all the means at our disposal. Military action is one of those means but will seldom be sufficient on its own. We require armed forces which can operate in support of diplomacy alongside economic, trade and developmental levers, to strengthen security and avert conflict as well as conducting effective military operations if required.



CHAPTER THREE

DEFENCE MISSIONS AND TASKS

44. Starting from these security priorities, the Review re-examined the broad Missions and more specific military tasks for our forces to form a basis for planning, taking into account their contribution to other policy objectives. The revised Missions cover both current priorities and longer term insurance:

- (a) Peacetime Security
- (b) Security of the Overseas Territories
- (c) Defence Diplomacy
- (d) Support to Wider British Interests
- (e) Peace Support and Humanitarian Operations
- (f) Regional Conflict outside the NATO area
- (g) Regional Conflict inside the NATO area
- (h) Strategic Attack on NATO.

The new Missions

45. The broad scope of defence activity covered by these Missions is similar to recent years but there are significant changes in the balance between the Missions and in the specific military tasks that underpin them. Defence Diplomacy becomes a Mission in its own right, reflecting the importance to our security of building and maintaining trust and preventing conflict, particularly in Europe. We anticipate continuing and perhaps growing calls for

contributions to international peace support and humanitarian operations, some of which could be militarily very demanding. For the foreseeable future, we envisage that the largest operation we might have to undertake would be involvement in a major regional conflict, whether as part of NATO or a wider international coalition. We need, however, to retain a basis on which we could reconstitute larger capabilities should a strategic threat to NATO ever begin to re-emerge.



*A submarine simulator at HMS NEPTUNE's
Submarine Command Team Training School.*

46. Peacetime Security. Support against terrorism of all kinds will remain of the highest priority for the foreseeable future. As in the last few years, our forces may be called on more frequently to assist, often in co-operation with other nations, with the evacuation of British (and other) citizens caught up in overseas crises. There may well be an increased requirement for some specialist support to civil authorities, for example in countering drug related crime.

47. Overseas Territories. The security of our Overseas Territories is a fundamental government responsibility. Although there are at present no significant military threats to these territories, our forces must be able to react to any emerging security problem, including from drugs and international crime, and where necessary to assist the civil authorities. We will, therefore, continue to provide garrisons and other forms of military presence as appropriate, including in the Falklands, Cyprus, Gibraltar and the Caribbean, and maintain the capability to supplement these as needed.

48. Defence Diplomacy. The Armed Forces and the Ministry of Defence have considerable experience and expertise in conflict prevention work but the creation of a formal Defence Diplomacy Mission will make this a core defence activity. This will give it greater priority and ensure that it is properly linked to the Government's broader policy objectives.



Troops from Poland and Ukraine train in the UK with the 2nd Battalion The Parachute Regiment on Exercise Cossack Steppe.

49. The new Mission covers arms control, non-proliferation and related security building measures; our Outreach programme in Eastern Europe; and wider military assistance and training for overseas countries. We intend to improve the effectiveness of our existing activities and increase our effort in all these areas including:

- an enhanced **arms control** programme incorporating an improved 'Open Skies' capability to monitor arms control agreements and additional training in arms control inspection techniques;
- an expansion of the **Outreach** programme including greater use of attachments and short term training teams, and additional training courses. A particular aspect of this programme is explaining the importance of accountability, and the role and value of civilians in defence management;
- wider **education and training** initiatives, to help develop the skills and structures needed by modern democratically accountable forces. This will include the establishment of a Defence Diplomacy scholarship scheme at the Joint Services Command and Staff College and providing extra manpower for short term in-country tasks.

50. We are also undertaking a worldwide reassessment of our requirement for defence attachés in the new international environment, taking particular account of their key part in defence diplomacy. We expect to create a number of new posts, including some specifically to support the expanded Outreach programme, and selection, training and career management of attachés will place increased emphasis on the qualities and skills needed for this role.

51. Wider British Interests. We see no diminution in the value of the activities which our forces undertake in support of British interests and standing overseas. They will continue to have a particular role in demonstrating our commitment to our international friendships worldwide, for example through our contribution to the Five Power Defence Arrangements in South East Asia. There are many ways in which they can assist broader national objectives and interests, including valuable training and support for British exports.

52. Peace Support and Humanitarian Operations. In a less stable world, we have seen more international operations of this type. The trends identified earlier suggest that this will continue. Britain will play its full part in such international efforts. At one end of the spectrum, this might involve logistic or medical support to a disaster relief operation. At the other, it might involve major combat operations as we were prepared to undertake when NATO's Intervention Force (IFOR) first deployed to Bosnia.

53. Our forces have developed particular experience and expertise in operations of this kind. We regard it as important to strengthen the effectiveness of the international community in peace support and humanitarian operations of all kinds and in co-ordinating between political, humanitarian and military operations. But we attach particular priority to enhancing the abilities of the UN in this area. Many of the improvements in capability set out in Chapter 5 will have a direct application in peace support and humanitarian deployments. As a Permanent Member of the Security Council, we intend to give a lead by making our national contribution to UN operations more effective. We will also make a much larger proportion of our front line capabilities potentially available to the UN for such contingencies, including all of our rapidly deployable forces. And our new Joint Defence Centre (see Chapter 9) will have a particular responsibility for contributing to the development of international peace support doctrine.

54. Regional Conflict Outside NATO. Outside Europe, the greatest risks to our national economic and political interests - and probably to international stability - will remain in the Gulf. Regional conflict in North Africa or the Near East could, in some circumstances, also affect our interests and those of our Allies. As the 1990/91 Gulf War and subsequent events have shown, this Mission may involve major combat operations as well as early, deterrent deployments. Such operations also impose demanding requirements, for example, in relation to strategic transport for deployment and supply, and to command and control.

55. NATO Regional Conflict. Britain has always made a major political and military contribution to NATO's capability for collective defence. This will continue to be at the heart of our defence policy. NATO no longer faces a Cold War threat but circumstances could arise in which Alliance members were threatened by a smaller scale but still militarily demanding regional crisis or conflict. NATO must therefore continue to provide a military capability to deter and if necessary respond to such crises. This includes the maintenance of a capability to deter the threat or use of nuclear weapons. The full range of Britain's military capabilities will continue to be available to NATO; in particular, we shall maintain our leading role in its Rapid

Reaction Corps.

56. Strategic Attack on NATO. No threat on this scale is in prospect. It would, however, be unwise to conclude that one could never reappear but the conventional forces needed to threaten such an attack would take many years to create. This Mission therefore provides for longer term insurance through a credible nuclear deterrent and the retention of the essential military capabilities on which we could rebuild larger forces over a long period, if circumstances were radically to worsen.

Conclusion

57. The pattern of demands on our forces which emerges is very different from that of the Cold War. In operational terms, the most demanding individual scenario against which we must now plan is no longer all-out war in Europe but a major regional crisis involving our national interest, perhaps on NATO's periphery or in the Gulf.

58. Apart from scale, however, the new international environment is in many ways more demanding. Undertaking smaller but frequent, often simultaneous and sometimes prolonged operations can be more difficult than preparing for a single worst-case conflict. During the 1990s, we have deployed or been prepared to deploy forces on a wide range of operations at various levels, in addition to maintaining our day-to-day responsibilities. Against the security priorities described earlier we can expect this trend to continue. There is a new emphasis on defence diplomacy and on the use of armed forces to support diplomacy in efforts to deter or manage crises, from humanitarian missions to UN embargoes and peacekeeping. Crises often occur with little warning and we need to be able to respond rapidly. In order to deter, and where deterrence fails, we must maintain forces which can be successful in conventional warfighting. Indeed most of the military capabilities required are equally valuable in support of the wider range of tasks we now face. All this places a premium on the flexibility and usability of the Armed Forces in the modern world.

59. We could of course, as a country, choose to take a narrow view of our role and responsibilities which did not require a significant military capability. This would mean that we would not wish and would not be able to contribute effectively to resolving crises such as Bosnia, Kosovo, or the invasion of Kuwait. This is indeed a real choice, but not one the Government could recommend for Britain.



CHAPTER FOUR

DETERRENCE AND DISARMAMENT

60. Deterrence is about preventing war rather than fighting it. All our forces have an important deterrent role but nuclear deterrence raises particularly difficult issues because of the nature of nuclear war. The Government wishes to see a safer world in which there is no place for nuclear weapons. Progress on arms control is therefore an important objective of foreign and defence policy. Nevertheless, while large nuclear arsenals and risks of proliferation remain, our minimum deterrent remains a necessary element of our security.

61. The Strategic Defence Review has conducted a rigorous re-examination of our deterrence requirements. This does not depend on the size of other nation's arsenals but on the minimum necessary to deter any threat to our vital interests. We have concluded that we can safely make further significant reductions from Cold War levels, both in the number of weapons and in our day-to-day operating posture. Transparency about nuclear weapons holdings also plays a part in arms control and, although we cannot give precise details of all aspects of our deterrent, we intend to be significantly more open in some areas.

Weapons

62. With the withdrawal of the last RAF WE177 bombs in March 1998, Trident is our only nuclear weapon. We need to ensure that it can remain an effective deterrent for up to 30 years. This is why we need a force of four Trident submarines. The last of these, VENGEANCE, will be launched later this year.

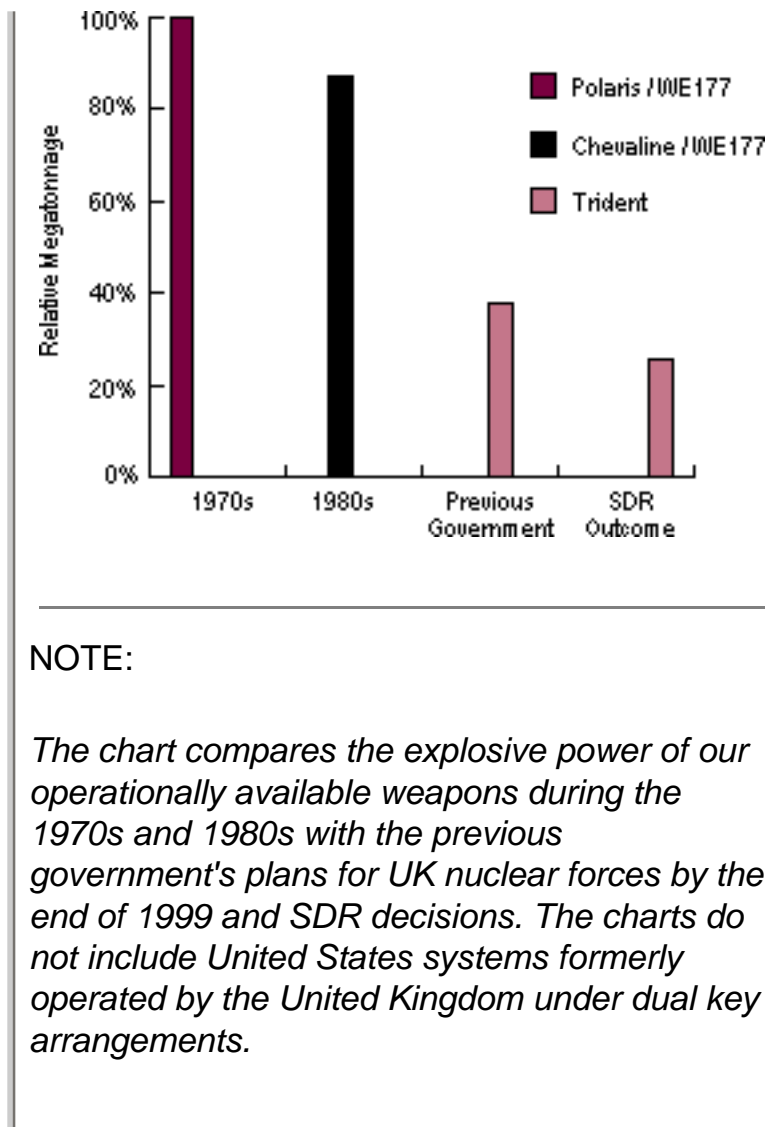


Trident submarine, HMS VICTORIOUS, on trials.

63. Similarly, we must judge our weapons requirements against the worst circumstances that we might face over Trident's life, however remote they may seem today. The credibility of deterrence also depends on retaining an option for a limited strike that would not automatically lead to a full scale nuclear exchange. Unlike Polaris and Chevaline, Trident must also be capable of performing this 'sub-strategic' role.

64. Against this background, taking into account Trident's greater accuracy than Polaris, the Review has concluded that we need a stockpile of less than 200 operationally available warheads. This is a reduction of a third from the maximum of 300 announced by the previous government and represents a reduction of more than 70% in the potential explosive power of the deterrent since the end of the Cold War.





65. We have also concluded, in the light of improved strategic circumstances, that the 58 missile bodies we have already purchased are sufficient to maintain a credible deterrent.

Operating posture

66. We intend to maintain continuous at-sea deterrent patrols, not least to avoid misunderstanding or escalation if a Trident submarine were to sail during a period of crisis. But the relaxation of tension and vast improvement in current strategic conditions since the end of the Cold War also permit us to adopt a reduced day-to-day alert state.

67. We will have only one submarine on patrol at a time, carrying a reduced load of 48 warheads. This compares with the previous government's announced ceiling of 96. This is a huge step change from the Polaris era. Although Trident is now our only nuclear weapon and covers both strategic and sub-strategic requirements, the potential explosive power deployed on a Trident submarine is one third less than a Polaris submarine armed with Chevaline.

68. The submarine's missiles will not be targeted and it will normally be at several days 'notice to fire'. This reduced state of alert will enable greater use of ballistic missile submarines for secondary tasks such as exercises with other vessels, equipment trials and hydrographic work. Similarly, current threat levels do not require large numbers of conventional forces permanently allocated to the protection of the deterrent. We will, however, ensure that we can restore a higher state of alert should this become necessary at any time.

Arms Control

69. Arms control plays an important part in our security. The United Kingdom is party to several arms control agreements which have contributed significantly to lowering tensions in Europe and to limiting the spread of weapons of mass destruction. We are committed to building on these agreements to further develop international confidence and stability. A key current task is the revision of the 1990 Conventional Armed Forces in Europe Treaty to ensure its continued relevance in the new strategic circumstances. We are also contributing to a number of other arms control initiatives and enhancing our national monitoring capabilities (see paragraph 49).

70. On nuclear arms control, the Government hopes for further bilateral reductions in US and Russian strategic weapons through the Strategic Arms Reduction Treaty process. We also hope to see progress towards reducing the thousands of Russian shorter range weapons. Our own arsenal, following the further reductions described above, is the minimum necessary to provide for our security for the foreseeable future and very much smaller than those of the major nuclear powers. Considerable further reductions in the latter would be needed before further British reductions could become feasible.

71. The Nuclear Non-Proliferation Treaty and the Comprehensive Nuclear Test Ban Treaty are key elements in nuclear arms control. We have ratified the Comprehensive Nuclear Test Ban Treaty and we hope that other states - particularly including India and Pakistan - will quickly follow our example to enable it to enter into force. Greater transparency about nuclear programmes also adds to international trust and security. The measures described earlier in this chapter will be a significant step in this direction.

72. We can also be more open about fissile materials. Our current defence stocks are 7.6 tonnes of plutonium, 21.9 tonnes of highly enriched uranium and 15,000 tonnes of other forms of uranium. The reduction in planned warhead numbers will allow us to place a surplus of 0.3 tonnes of weapons grade plutonium under international safeguards (along with surplus non-weapons grade material). We will also cease exercising our right as a nuclear weapon state under the Nuclear Non-Proliferation Treaty to withdraw fissile material from safeguarded stocks for nuclear weapons. Future withdrawals will be limited to small quantities of materials not suitable for weapons purposes and the details will be made public. No material withdrawn from safeguards will be used in nuclear weapons. All planned future reprocessing will also be

carried out under safeguards and we intend to publish an initial report by 2000 on past defence fissile material production.



UN Special Commission (UNSCOM) weapons inspectors in Iraq.

(By courtesy of UNSCOM)

73. The effectiveness of arms control agreements depends heavily on verification. The United Kingdom has developed particular expertise in the monitoring of fissile materials and nuclear tests. We plan to add to this by developing capabilities which could be used to verify reductions in nuclear weapons, drawing on the expertise of the Atomic Weapons Establishment at Aldermaston. This will begin with a study lasting some 18 months to identify the technologies, skills and techniques required and what is available in this country.

Costs

74. We estimate the total cost of acquiring the Trident system to be about £12.5Bn, almost all of which has already been spent. On the basis of our experience so far, we estimate that the running cost of the Trident submarine force will average some £280M a year over its life time. The current annual cost of our warhead and fissile material programme is some £400M a year. About one third is directly related to Trident, almost a third is related to costs arising from previous nuclear weapons and the remainder is infrastructure costs.

75. These are very substantial costs but need to be seen in perspective. The annual cost (including the continuing costs from earlier programmes) is little more than 3% of the defence budget. This is not a disproportionate investment in a capability of such vital importance to our national security.



CHAPTER FIVE

THE FUTURE SHAPE OF OUR FORCES

76. The Review has demonstrated that our forces still have some way to go before they are fully adapted to the needs of the post-Cold War era. We need to solve the problems of undermanning and additional overstretch which comes from over-commitment. And we need to remedy weaknesses in key areas which limit their effectiveness for the changed pattern of operational demands. Modernisation has therefore been a key theme of our work.

77. In the Cold War, we needed large forces at home and on the Continent to defend against the constant threat of massive attack from an enemy coming to us. Now, the need is increasingly to help prevent or shape crises further away and, if necessary, to deploy military forces rapidly before they get out of hand. Most force projection operations of this kind are likely to be multinational. As in Bosnia, we can draw on the immense advantages of fifty years of working within the NATO Alliance. We also need to be able to participate in UN, Western European Union (WEU) or other multinational operations.

78. A similar broad range of capabilities is likely to be required to meet contingencies which may arise from our direct security interests and from our wider international responsibilities. In each case we could find ourselves in operations involving modern conventional warfare. Moreover, only forces equipped and trained for warfighting will have the range of specific capabilities - as well as the deterrent effect - to be effective across the full range of peace support and humanitarian operations.

79. While single-Service skills and ethos will remain the essential foundation of all our military capability, most future operations will be conducted by joint forces composed of fighting units from individual Services. These will be under joint (tri-Service) command and control, drawing on joint intelligence capabilities and with joint logistics. We must therefore also build the joint approach into our doctrine and our preparation and training for operations; in many areas, support functions can also be most effectively provided on a defence-wide basis (see [Chapter 9](#)).

Future Combat Capabilities

80. We cannot insure equally against every possible contingency and what we contribute to multinational operations must take account of what our Allies are able to do. Our modernised forces need a cost-effective mix of combat capabilities complemented by wider capabilities which will enable them to make a significant and effective contribution in the very wide variety of combat and other operations in which they may become involved. Such 'force multipliers' will be crucial to retaining a technological edge over potential adversaries.
81. Central to this is the ability to gather information about an opponent and use it to maximum effect. In military terms, the first aspect is our intelligence, surveillance, target acquisition and reconnaissance capability (ISTAR). This is not only vital for combat operations but also increasingly important for many peace support operations. New methods of information gathering - particularly through sensors which operate at long distance - are becoming available. They had a significant impact in the Gulf War and further improvements are expected to lead to a step change in the information available to commanders at all levels.
82. The sheer volume of information will bring its own problems. It will only be useful if we can get the information to the right place at the right time and relate it to the wider military and political context. This will depend on developing improved command, control and communications capabilities ("C3" in the jargon). In doing so, we will need to give greater priority to ensuring our command and control arrangements enable us to work effectively in multi-national operations, including NATO's new combined joint task forces, UN missions and ad hoc coalitions.
83. The increasing dependency of modern armed forces on high technology information systems in this area brings both vulnerabilities against which we must protect ourselves and opportunities which we need to be able to exploit. Indeed, the potential vulnerabilities and risks arising from "information warfare" go much wider than the Armed Forces and the defence infrastructure. Defence is therefore contributing to the development of national security policies and technical measures to respond to these new challenges.
84. Our biological and chemical defence capabilities have assumed a new significance in the post-Cold War era. Although the use of such weapons is banned by international law, some opponents may be tempted to regard their use or threat as a counter to superior conventional forces. The evidence which the UN Special Commission has uncovered about Iraqi biological and chemical weapons programmes and Iraq's continuing failure to provide convincing evidence of the destruction of these capabilities provides the clearest and most immediate example of the dangers we may face. But there is also worrying evidence of wider proliferation.
85. At sea, the emphasis is continuing to move away from large scale maritime warfare and open-ocean operations in the North Atlantic. In future littoral operations and force projection,

for which maritime forces are well suited, will be our primary focus. These tasks, which range from the evacuation of citizens from an overseas crisis to major warfighting operations as part of a joint force, will be highly demanding. The balance of anti-mine warfare previously centred on defence of UK waters will also move more towards force projection operations.

86. For the land battle, we will continue to need a full range of war fighting capabilities. Scale is likely to be less important but we need to be capable of offensive, mobile operations. Key requirements will be firepower (including air-delivered) with greater emphasis on precision and range to maximise military impact and minimise civilian casualties, and protection for our forces in a wide range of circumstances to make their deployment an acceptable risk. But both firepower and protection must be more deployable and more mobile on the battlefield. To achieve this, we will need to exploit to the full, new equipment entering service - notably 'smart' weapons and the Apache helicopter - and improved intelligence and reconnaissance. Over the period covered by the Review these changes will increasingly affect the nature of the land battle and we will need to adapt the structure and balance of our forces accordingly.

87. Air power will be a crucial factor in maritime warfare, on most battlefields, and as part of the most demanding peace support operations as in Bosnia in 1995. Air superiority and air defence will be essential for a wide range of deployed operations. For the next decade at least, the direct air defence of the UK will be a lower priority. Long-range air-attack will continue to be important both as an integral part of warfighting and as a coercive instrument to support political objectives (as demonstrated in the Gulf earlier this year). There will be an increasing premium on "stand-off" precision missiles which can be launched at targets from long range.



A VC10K3 of No. 101 Squadron refuels a Eurofighter.

Scale of Effort

88. We cannot predict the crises we will face. Our forces are our insurance against the unexpected. We must not skimp on the premium because we will pay a heavy price if we get it

wrong. At the same time we cannot afford the luxury of having additional forces 'just in case'. Our objective is to meet our purely national requirements and be able to make a reasonable contribution to multi-national operations in support of our foreign and security policy objectives.

89. On this basis, we have set some broad benchmarks for the scale of our planning. In addition to providing whatever military support is required to continuing commitments such as Northern Ireland, we should be able to:

- respond to a major international crisis which might require a military effort and combat operations of a similar scale and duration to the Gulf War when we deployed an armoured division, 26 major warships and over 80 combat aircraft.

or

- undertake a more extended overseas deployment on a lesser scale (as over the last few years in Bosnia) while retaining the ability to mount a second substantial deployment - which might involve a combat brigade and appropriate naval and air forces - if this were made necessary by a second crisis. We would not, however, expect both deployments to involve warfighting or to maintain them simultaneously for longer than six months.

We must also retain the ability, at much longer notice, to rebuild a bigger force as part of NATO's collective defence should a major threat re-emerge in Europe.

90. These scales of effort will not require significant changes to the strength of our Regular forces. But these forces must be configured so that, as well as responding to major crises, they are able at other times to carry out day-to-day tasks, several small but perhaps long-running commitments and respond to minor contingencies.

Joint Rapid Reaction Forces

91. The range of contingencies which may arise from the new-style risks and challenges described earlier require a different form of military response to the territorial defence of the Cold War. For conflict prevention, peace support, crisis management and war, the key will be to put a powerful joint force into place fast, capable of immediate and, if necessary, sustained operations. This applies to NATO commitments, operations under the auspices of the UN or other international organisations, and ad hoc multinational coalitions. The existing Joint Rapid Deployment Force can provide an early initial presence, which may act as a deterrent. Nevertheless, it is inadequate for the new environment because it is relatively small, lightly armed and potentially vulnerable if attacked before it can be reinforced by heavier forces which take much longer to deploy.

92. Our future military capability will therefore be built around a pool of powerful and versatile units from all three Services which would be available for operations at short notice. They will be known as Joint Rapid Reaction Forces. From these we will put together the best force packages - with real punch and protection - for particular circumstances. To make this work, we will also need to improve our strategic transport, operational logistics and medical services, and our deployable command and control arrangements. Our aim is for the Joint Rapid Reaction Forces to be operational in 2001.

93. The pool of Joint Rapid Reaction Forces will cover all military tasks for which we need to provide forces at short notice, including to NATO's Allied Command Europe (ACE) through our contribution to the ACE Rapid Reaction Corps and the ACE Mobile Force (Land). Its first echelon will always be held at very high readiness for 'early entry operations' - for example to secure a landing point - and to provide an initial military capability. Its second echelon will provide follow-up forces normally held at slightly longer readiness.

94. The first echelon forces would be able to provide a maritime task group, an air power package which could be used initially to deter or contain aggression, lead battle groups of land and amphibious forces (including an armoured battle group), and a special forces component. We are creating a fully equipped rapidly deployable Joint Task Force HQ to command these initial forces and be able to expand to command a larger force if required. We will also maintain the nucleus of a second HQ which could command a second contingency.

95. The second echelon naval and air forces will reinforce the initial force packages so that they can undertake substantial combat operations and, in particular, give them a significant offensive capability. For land operations, we will be able to provide a brigade-sized force. This could range from a commando or airmobile brigade to an armoured brigade.

96. **Strategic Transport.** It is not enough to modernise the front line. We have an urgent need to improve our strategic transport, to allow us to move more powerful forces quickly to an overseas theatre. In the short term we expect to do this through acquiring four additional roll-on roll-off container ships and four large C17 aircraft or their equivalent. In the longer term, we will also need to consider a replacement for our remaining elderly transport aircraft. The European Future Large Aircraft is a contender for this requirement.



Sea King helicopters from the Royal Navy's 846 Squadron on a joint exercise in the USA.

97. Joint Helicopter Command. The support helicopter plays a crucial role in virtually all today's military operations. Its importance in providing tactical mobility and flexibility is likely to grow, especially when the Apache attack helicopter enters service. Although our support helicopters are already used very flexibly, to achieve maximum operational effectiveness we have decided to bring together all our battlefield helicopters (ie excluding those normally based on warships or used for search and rescue) in a single joint command. To achieve greater operational effectiveness, and enhance training and support, this Command will be responsible for the peacetime management of the helicopter fleet and for providing the helicopter force packages required by operational commanders.

98. Logistic Enhancements. The increased operational pressures of the last few years have shown up weaknesses in our ability to sustain forces deployed overseas, particularly where local facilities are limited. In particular, we would face serious difficulty in supporting two substantial operations at once. The pressure on our logistic services has been so great that specialists in key areas have only 14 months between periods of service overseas.

99. To remedy these weaknesses and ease overstretch we plan a package of logistic enhancements. These will include the creation of two Joint Force Logistic Component Headquarters and the creation of some 1900 new regular logistic posts to allow us properly to support two concurrent operations. Where this is appropriate, we will consider the use of contractors to assist with logistic support. At present this is more appropriate for well-established operations - as in Bosnia - but we are exploring whether this can be extended through the use of sponsored reserves (see [paragraph 107](#)).

100. Medical Support. The Review has identified a particular weakness in the amount of

medical support we can provide for substantial combat operations overseas. (In the Cold War we had the use of permanent facilities and assumed general mobilisation.) We therefore plan to establish a new Regular ambulance regiment, acquire an additional 200 bed primary casualty receiving ship, increase the Regular element of the Defence Medical Services, and use the compulsory call out of medical reservists to augment Regular field hospitals when a surge capability is needed (see [paragraph 106](#)).



Royal Navy doctor with medical assistants.

101. **Chemical and Biological Defence.** We are responding urgently to the risks arising from the proliferation of chemical and biological weapons by significantly improving our defensive capabilities. The importance of this was underlined by Iraq's recent confrontation with the UN. We are building up stocks of existing vaccines and at the beginning of June 1998 we and the United States announced our agreement to co-operate closely in the development of new medical and other countermeasures.

102. Much of our specialist capability is provided by the Territorial Army. It cannot be deployed sufficiently quickly to meet the current range of possible operational requirements. We will therefore be creating a mainly regular joint Army/RAF nuclear, biological and chemical reconnaissance organisation for land-based operations. This will be accompanied by enhancements to our biological and chemical detection and decontamination equipment.

103. **Joint Training.** The joint approach will also be built into our training and preparation for operations. The Chief of Joint Operations will be given additional responsibility for joint operational training and exercises (see [paragraph 174](#)). Two important initiatives in this area will be the further development of joint RN/RAF carrier-based Harrier operations and joint Army / RAF training for ground based air defence. In the longer term, both are likely to lead to the development of joint operational forces.

Readiness and Reserves

104. Operational readiness is a critical factor in our ability to react to both major crises and sudden incidents. But high readiness also involves extra cost and makes it more difficult to carry out training and peacetime tasks. We must therefore strike a balance between forces which may be needed at short notice and those for which we can expect a reasonable amount of warning and preparation time. We have therefore adopted a graduated approach to readiness under which units - and the transport and support needed to deploy them - can be provided at levels of notice matched to their particular operational tasks.

105. Reserve Forces have an integral part in our military planning but the change in strategic circumstances has a significant impact on the scale and nature of their role. We no longer need - and cannot afford - to maintain additional combat units and support services simply against the possibility of a general war in Europe. At the same time, we inevitably rely on regular forces to meet our day-to-day commitments and respond to short notice contingencies. To meet the demands of the future, we need a different kind of Reserve force, more closely integrated with their Regular colleagues, more capable of use at shorter notice and in crises short of all-out war in Europe.

106. We have concluded that, while it would not normally be appropriate to call out formed units of Reserves at short notice we should be prepared to do so if this were necessary to complete the build-up of a large military force in a major international crisis such as the Gulf War. And, because it would be neither cost effective nor practical to maintain permanently the extra medical support which would only be required for a substantial warfighting operation, we would also be prepared to call out medical reserves at lower scales of effort. We propose to develop plans with the National Health Service and health trusts to enable us to do so, if necessary, without disruption to the health service.

107. We also plan to extend the use of individual reservists, particularly specialists - some 2500 reservists have served very successfully in Bosnia. In particular, we hope to develop the use of sponsored reserves - that is contract support personnel who may be called up for active service in a crisis.

108. This new pattern of operational requirements will not significantly affect the structure of the Royal Naval and Royal Marine Reserves or the Royal Auxiliary Air Force because they are largely employed as individuals, and there will be small increases in their size. We need, however, to modernise the Territorial Army (TA) so that it will be as valuable in helping us to meet the challenges of the future as it has the dangers of the past.

109. The TA is about 56,000 strong, still 80% of its size at the end of the Cold War, and largely made up of formed units at low readiness intended for the defence of the UK against invasion

or to reinforce NATO in Germany. For the future we need a smaller but more readily deployable and usable TA closely integrated with our Regular force elements. Although numbers will fall to around 40,000 volunteers with reductions concentrated in yeomanry, infantry and supporting combat services, crucially, we will be able more rapidly to bring the TA to full operational readiness. To achieve this, we will create an Army Mobilisation Centre and ensure that TA units are fully manned and trained and equipped to the standards needed to undertake their tasks effectively.



First female crane drivers of the Territorial Army on a training course at the Royal School of Military Engineering at Minley.

Force Structure

110. We have re-examined our force structure against the revised set of military tasks and the analysis of likely future operations to emerge from the Review. The front-line has already reduced significantly since the end of the Cold War, particularly in areas focused on the defence of Western Europe. For example, our tank fleet has been reduced by 45%, our submarine force cut by 57%, and our air forces are already planned to withdraw completely from Germany by 2002. Nevertheless, further changes are needed in the light of the continued evolution of the strategic environment, particularly to produce greater flexibility and deployability.

111. As part of this process of modernisation, the Army will be restructured to improve its ability to train for, mount and sustain deployed operations without excessive disruption to Service people and their families. It will retain two deployable divisions, one based in Britain and the other in Germany, and there will be no changes in the size of the regular infantry which will continue to be in heavy demand. We have already made a good start in improving recruitment but we need to end undermanning and make the best use of our resources.

112. We currently have three armoured and two mechanised brigades which can be used for a wide range of tasks and three lighter and more specialised airborne, airmobile and commando brigades. An additional mechanised brigade will provide a more balanced operational cycle which better meets readiness and other requirements for both peacekeeping and warfighting and, because of its wider utility, would also ease overstretch. At the same time, we do not see a need for parachute operations at bigger than battalion level. We therefore propose to convert the present airborne brigade into a mechanised brigade. The parachute role will be transferred to the airmobile brigade which will become a highly mobile air-manoeuvre brigade when the attack helicopter enters service. Once the Apache helicopter enters service this will provide a very powerful striking force for rapid reaction and other operations.

113. The Gulf and Bosnia have demonstrated that tanks have a continuing importance although the ways in which they are used may vary considerably. Experience also suggests that our current tank regiments are smaller than the ideal and, in particular, do not contain sufficient manpower for some roles. We therefore intend to replace the present eight regiments (planned to have about 470 personnel) with six larger regiments of about 600 personnel. At war strength they will each be equipped with 58 tanks rather than the currently planned 38 but will only hold 30 tanks for peacetime training. This will allow a more efficient 'whole fleet' approach to the use and maintenance of our tank force and allow some tanks to be held ready for rapid deployment.

114. This restructuring will also involve removing some 2,500 troops, including three armoured regiments, from Germany to the United Kingdom. Two of these regiments will be given new roles as part of the change from eight to six armoured regiments. One will become a new armoured reconnaissance regiment and the other will form part of our new joint biological and chemical defence capability ([paragraph 101](#)).



RAF Harrier GR7s in the foreground on HMS Invincible with Sea Harriers at the hover making their approach.

115. The focus for our maritime forces in the new environment will move towards rapid deployment operations. Our amphibious capability with its improved specialised shipping will give our Rapid Reaction Forces important extra flexibility. Aircraft carriers will have a wide utility, including for deterrence and coercion. Our current INVINCIBLE class carriers will be given a wider power projection role by the development of a "Joint Force 2000" combining RN and RAF Harrier aircraft. To meet our longer term needs, we plan to replace our current carriers from around 2012 by two larger, more versatile, carriers capable of carrying a more powerful force, including a future carrier borne aircraft to replace the Harrier. These plans will now be developed in detail in the normal way.





Scimitar armoured reconnaissance vehicles of the Household Cavalry Regiment transfer to the Royal Fleet Auxilliary ship SIR TRISTRAM en route to Egypt for Exercise Bright Star.

116. On the other hand, the trend away from large scale open-ocean warfare has led us to revise our plans in some other areas. While we will need to maintain the range of our current capabilities, we have concluded that we can reduce our force of attack submarines over the next few years from 12 to 10 and maintain the Merlin anti-submarine helicopter force at 44. We also anticipate withdrawing the RAF's Tornado aircraft from the anti-ship role. There will also be an impact on the number of destroyers and frigates we need. Taking into account their wide peacetime utility, our reassessment has concluded that the total force can be reduced from 35 to 32. With the reduced requirement for mine clearance in home waters, we judge that 22 modern Sandown and Hunt class minehunters will be sufficient rather than 25 as previously planned.

117. The acquisition of 232 Eurofighters remains central to our long term plans, providing a step change in the RAF's ability to achieve air superiority and provide air defence for our forces. Eurofighter will also be able to fulfil some other roles currently provided by the Jaguar. To reflect changes in the scale and readiness needed for future operations, including the anticipated withdrawal of the Tornado from the anti-shipping role, and the introduction of Eurofighter in the next few years, we have concluded that we can reduce our present front line

by 23 offensive support and 13 air defence aircraft.

118. Unlike other recent reviews, these changes will not lead to cuts in the overall strength of our Regular forces. In some areas, such as logistics, previous cuts have gone too far and we are strengthening those areas and capabilities which assume greater importance in the new strategic environment. Similarly, we intend to use manpower released by the minor reductions in escorts, submarines and fast jets to fill gaps in our front line manning. The overall result will be a rebalanced and modern force structure capable of meeting our future defence and security needs more effectively.



CHAPTER SIX

A POLICY FOR PEOPLE

119. Britain's defence depends on the military who serve in the Armed Forces and the civil servants who work alongside them in the Ministry of Defence. We ask a lot of them, especially on operations and preparing for operations. Ultimately we ask people to risk their lives. The demands do not stop at the front line, they affect the military and civilians in the support chain and the Ministry itself. And they affect their families. We also expect a lot in skills - defence is a highly professional, increasingly high technology, vocation.

120. We must therefore recruit highly motivated people. We must invest in their training. We must retain them and maintain their motivation. To do this we must equip them properly for the tasks we give them. We must also ensure that our demands on them and their families do not become unreasonable.

The Services

121. Our plans for the Services address all stages of the individual's career, from recruitment, through training and education to resettlement. They are designed to enhance the attractiveness of a Service career both to the young and their parents and advisers. We have already made clear our determination that the Armed Forces will offer a worthwhile and rewarding career for all ethnic groups, both for men and women. We are increasing the emphasis the Services place on vocational training and education with new schemes linked to the Government's 'Learning Age' proposals. We shall be making improvements to a number of aspects of Service life, both for the forces themselves and for their families. And we wish to ensure that when Service personnel leave the forces, they return to the civilian employment market better trained and better qualified. We shall be developing a comprehensive strategy for our people for the 21st century, with major initiatives addressing key areas such as pay and pensions systems, and better career management.

122. We must also deal with the underlying problems of undermanning and overstretch that we have inherited. This is essential to maintain the professionalism for which our forces are so

widely admired and, in particular, to provide the highly responsive forces we need for the new international environment. This was emphasised by the evidence from the Review's internal consultation. Our people are looking to the Review to set out a future for defence in which they can have confidence. A crucial test will be whether we can solve these problems.

Overstretch and Undermanning

123. Overstretch and undermanning are linked problems. Overstretch is trying to do too much with too little manpower. One result is that units and individuals - especially in key areas - are separated from their families too often and for too long. Another result is that preparation for other tasks and longer term training suffer.

124. Undermanning - that is when units are not up to planned strengths - is one of the causes of overstretch. Individuals within undermanned units have to do more and, particularly for operations, individual reinforcements have to be brought in from other units. Unsurprisingly, the additional pressures from persistent overstretch contribute to higher exit rates from the Armed Forces thus adding to manning difficulties.

125. We must break this vicious circle. To do so we must match the commitments we undertake to our planned resources, recognising that there will always be the risk of additional short-term pressures if we have to respond rapidly to an unforeseen crisis. We need to improve recruitment and retention so that our units are properly manned. And we need to use our manpower in the most effective manner, particularly seeking to avoid unnecessary separation or disruption to individuals and their families.

A Policy for Full Manning

126. The Review has designed a future force structure matched to the level of commitments we plan to be able to undertake. These structural changes, combined with measures to increase recruiting and retention, will ease overstretch. This is why, for example, we propose to increase the strength of our logistic support units, one of the areas where overstretch is at its worst. We are also seeking to ease overstretch by better use of manpower. The changes described in [the previous Chapter](#) in Army organisation, and the fuller manning of the RN and RAF front line made possible by the reduction in numbers of escorts, submarines and fast jets, will help significantly.

127. Recruiting has been a problem over the last few years, partly due to the impact of the sharp reductions in the size of the Forces after the Cold War. That era of decline is behind us. We need to restore intakes to a level which meets our long term needs. This is a challenging task but recent trends are encouraging. We need to recruit high quality adaptable people in a rapidly changing society. We will be putting additional emphasis on recruiting and adapting our

approach to better reach all sections of the community. We are particularly anxious to recruit more from the ethnic minorities and more women, whose potential we have not fully tapped.



Royal Navy rating at work in a naval operations room.

128. We lose too many recruits during initial training. All the Services have introduced special courses and other initiatives to reduce training wastage. We are looking at ways in which these initiatives can be extended without lowering the standards of our trained personnel. We are also studying possible ways of changing the career structure to encourage more people to serve for longer periods. Better retention will not only ease overstretch but give us a better return on our investment in training.

A more Attractive Career

129. Tackling the disincentive of overstretch will help with recruiting and retention. But, above all, we need to take positive action to make the Services more attractive as a career. For most people the Services cannot be their only career. It is therefore vital that we provide them with transferable qualifications for return to a civil society which does not at present sufficiently recognise the high skills and real responsibility acquired in the Services.



An RAF technician working on a Tornado engine gearbox at RAF St. Athan.

130. We will be introducing new training and education initiatives linked to the Government's wider proposals for the 'Learning Age'. All recruits to the Services will be given the opportunity to gain the six key skills identified by the Department for Education and Employment (DfEE) as needed by all in the workplace; and all personnel will be given the chance to achieve qualifications recognised by civilian employers. Within the framework of the 'Learning Age' proposals, our 'Learning Forces' initiative will give our people the skills they need to make the best possible contribution to the Armed Forces, and equip them to return to civilian life. This major new initiative will expand education and vocational training opportunities for the Armed Forces. Service personnel will be able to claim 'Learning Credits' both whilst serving and for some time afterwards. All these proposals will make a Service career more attractive and improve its training benefits; and they will also benefit defence by developing the skills needed for modern warfare and acting as a boost for retention. Moreover, the nation will also benefit as better-qualified personnel return to the civilian employment market after their Service career.

131. We are also taking a range of other steps to improve the lot of Service personnel and their families. We will be improving operational welfare provision and introducing a common annual leave entitlement for all ranks which will benefit the most junior Army and RAF personnel, placing them on a par with their naval counterparts. We will also be giving higher priority to improving the standard of single living accommodation. For families, we are setting up a task force to address the special problems which arise from their mobile lifestyle, for example in obtaining access to healthcare and school places, and funding for Service children's schools abroad will be increased to mirror the Government's wider initiative to improve literacy and numeracy standards.



Army families can contact troops in Bosnia via the Internet

132. We are also setting up a cell to provide a focal point for veterans seeking guidance on where and how they can obtain advice to deal with whatever problems they may have. This will be staffed by Service or ex-Service personnel.

133. We shall be developing a common personnel strategy, led by the centre but implemented by the individual Services, to build on this approach for the long term. We shall also be undertaking a series of initiatives including the introduction of a new pay system and a common appraisal system for officers, reviews of career structures, and compensation and pension arrangements, and examination of the need for a single, tri-Service Discipline Act.

Civilian Personnel

134. Roughly a third of Ministry of Defence employees are civil servants. The contribution they make is often not fully appreciated. The majority are integrated into military Commands providing a wide range of day-to-day support functions. Some deploy on operations alongside military colleagues, sharing the risks and discomfort. Civilians and military staff also work as integrated teams in the Ministry of Defence itself which combines the functions of a Department of State and the highest level military headquarters, and in MOD's research and procurement activity. We will continue to need highly motivated and skilled civilian staff in all these capacities.



Working with Stingray torpedoes at the Royal Naval Armament Depot Gosport

135. Although Service and civilian roles and therefore conditions of employment differ in many respects, the Government is similarly committed to providing a rewarding career in defence for its civilian staff, while recognising that career patterns may well be different from those in the past. Many key objectives apply in broadly similar ways to military and civilians - for example the Department's equal opportunities policies for women, ethnic minorities and civilians with disabilities, and the large scale Investors in People programme.

136. The principles for the management of our civilian staff have been set out in a Personnel Policy Statement and this is supported by a Civilian Personnel Management Strategy setting out clear priorities for action which will ensure that our arrangements match best practice elsewhere. We will continue to improve career information and guidance, encourage continuous professional development, provide better targeted and more thorough equal opportunities training, more flexible pay and grading systems, and improve internal communications, both upward and downward.

137. The development of professionalism and skills is, for example, a central feature in the work being done to introduce resource accounting and budgeting, where much greater emphasis has been placed on the achievement of professional finance and accountancy qualifications and appropriate training and career management. More generally, the development of staff will be linked, where appropriate, to the Government's wider plans for lifetime learning. We will continue to develop schemes to encourage and support National Vocational Qualifications, as our highly rated Modern Apprenticeship scheme does, and will look to broaden our contribution to other schemes - such as those run by the Prince's Trust - which help people develop their skills, broaden their experience and make a contribution to the community.

Putting our People First

138. Past defence reviews have concentrated on strategy and equipment, sometimes with insufficient consideration of people. This Review has given people their proper place at the centre of our plans. The initiatives described above are designed to tackle current problems - although they cannot remove them all overnight. As importantly, they form part of a coherent strategic approach intended to meet our long term need for high quality Service and civilian personnel and give them confidence of their future in defence.



CHAPTER SEVEN

EQUIPPING THE FORCES

139. Modern battle-winning forces need equipment which gives them a decisive technological edge in critical capability areas. A major force modernisation programme is already under way. The introduction of a new generation of weapons and other key systems will bring major improvements in military capability. These include not only major fighting equipments such as Eurofighter, the Apache helicopter and the Horizon frigate projects but 'force multipliers' such as the COBRA weapon locating radar. Our re-examination of the equipment programme, as with the force structure, has therefore centred on ensuring that we have the right balance of capabilities for the future requirements we have identified.

140. We do not necessarily want to replace existing equipment on a one for one basis. As already described, the relative priority and the scale of our requirements in particular combat areas is changing. We also need to take into account the way in which the next generation of equipment both individually and, even more, collectively, will offer a new level of battlefield capability.

Major Fighting Equipments

141. We will continue to update our escort and attack submarine fleets with the introduction of the remaining Type 23 frigates and Astute class submarines and by withdrawing older vessels, including our Swiftsure class submarines. We will fit all of our attack submarines to fire Tomahawk cruise missiles to extend our ability to use them for deterrence or coercion. The Horizon air defence frigate will provide the fleet with greatly improved area air defence from early in the new century. The RAF's modernised Nimrod maritime patrol aircraft and the RN's Merlin helicopter will provide a powerful extension of our anti-submarine capability, including in shallower waters, although the reduction in scale of likely operations means that we need no more Merlins than we already have on order.

142. Aircraft carriers and seaborne forces have a wide utility, particularly for power projection and rapid deployment operations. As described in [paragraph 115](#), we plan to replace our three

small carriers with two larger carriers from around 2012. Work will now begin to refine our requirement but present thinking suggests that these might be of the order of 30,000-40,000 tonnes and capable of deploying up to 50 aircraft, including helicopters. The introduction of HMS OCEAN, our new helicopter carrier, and HMS BULWARK and HMS ALBION, the two new amphibious landing ships under construction, will give our rapid reaction forces important extra flexibility.

143. New equipment entering service now and in the next few years will greatly improve our ability to conduct the hard hitting, mobile land operations of the future. These include the Army's Challenger 2 main battle tank, the Apache attack helicopter equipped with Longbow radar and Hellfire missiles and a medium range anti-tank guided weapon. Completion of the upgrading of the Jaguar aircraft fleet will provide enhanced battlefield air support until replaced by Eurofighter in this role and from 2001 the RAF will also be equipped with the Brimstone advanced anti-armour missile.

144. For the longer term, we are examining extended range precision munitions for the AS90 self-propelled gun and the MLRS rocket launcher and a replacement for the light gun. These should provide us with ability to attack opposing forces with indirect fire more effectively and at longer ranges. We have also agreed with France and Germany the next stage in the development of the Multi-Role Armoured Vehicle which will provide protection and mobility for our troops on the battlefield.

145. Eurofighter will be equipped with the ASRAAM short range missile entering service very shortly and a beyond visual range air-to-air missile. This will provide Eurofighter with a highly effective air-combat capability well into the next century. For the present, taking into account Eurofighter's effectiveness against manned aircraft and the current stage of development of systems to counter ballistic missiles, we have concluded that we do not need to procure a new ground launched medium or long-range air-defence missile. We will, however, monitor developments in both threat and capability closely, participate in work in NATO and with Allies, and have established a technology development programme to keep this option open should the balance change significantly - for example if a new ballistic missile threat to this country were to emerge. As noted earlier, we are also investing more in protective measures against possible chemical or biological attack against deployed troops.



Eurofighter.

146. The mid-life upgrade for the Tornado GR4 bomber will provide us with a powerful long range land based air attack capability for many years. This will be enhanced by the introduction of the Storm Shadow stand off missile from 2001. For the longer term, we are continuing studies for a replacement offensive air system. In addition to fast jet aircraft, we will consider other possible solutions - for example involving stand-off missiles or unmanned aircraft.

147. Strategic and tactical mobility will be vital to the sort of military operations we envisage undertaking in the future. Our tactical capabilities are already being improved by introducing additional support helicopters and replacing our oldest Hercules aircraft by the new C-130J version. As described in [Chapter 5](#), we will meet our requirement for strategic sealift by acquiring four roll-on roll-off container ships, and meet our strategic airlift needs in the short term with four C-17 large aircraft or their equivalent. In the longer term, we need to consider a suitable replacement for our remaining elderly transport aircraft, for which the proposed European Future Large Aircraft is a contender. Bids will be invited to meet the short-term and long-term air transport requirements in parallel competitions. We will also be issuing requests for information for a new tanker aircraft for air-to-air refuelling.

Enabling Capabilities

148. Modern forces depend more than ever on fast, detailed and accurate intelligence, surveillance, target acquisition and reconnaissance (known as ISTAR) to make the best use of the new generation of fighting equipment and smart munitions. The Review has emphasised ([paragraph 81](#)) the importance of investment in this area not only to maintain a qualitative edge in combat but to facilitate the often rapid decision-making needed in complex political circumstances. A range of advanced systems are planned or already entering service including the airborne ground surveillance radar (ASTOR), a battlefield unmanned target acquisition

vehicle (PHOENIX), an artillery locating radar (COBRA) and we envisage a new generation of battlefield reconnaissance vehicles (TRACER). We are also planning to replace our ageing survey ships.



HMS OCEAN enters Plymouth.

149. Improved information and communications systems will be vital to make best use of the vast increase in the volume of strategic and tactical information available to commanders at all levels. The central challenge is to integrate sensors, weapons, platforms and logistics operating in all environments to deliver the desired military capability. A crucial element of this will be the further development of the Joint Command Systems Initiative, including provision of a secure intranet for deployed operations. In the short to medium term, the introduction of the BOWMAN combat radio system will also be an important step. Other planned improvements include an upgrade of our satellite communications, the extension of the Joint Tactical Information Distribution System and improvements in the joint capability of the RN Command Support System.

Future Developments

150. Over the next twenty years, the cumulative effect of these new weapons systems and the accompanying step changes in the intelligence and targeting information available to commanders will radically alter the way in which battles are fought. It is too early to predict precisely all the military implications of these changes and of the opportunities that may arise for opponents to challenge us through unconventional means, exploiting the advances in civil technology. It will, however, be vital that we keep fully abreast of the changes as they occur. We will need to ensure that our forces' equipment remains of the highest standard - the improvements which we plan in our acquisition process (described in [Chapter 8](#)) will play an important part in this. In the longer term, we will also need to consider in the light of operational experience how to adjust the balance of investment between weapons, platforms and other systems, and adapt our force structure, to get the most out of the advanced capabilities that

will become available.



CHAPTER EIGHT

SMART PROCUREMENT

151. One of the first conclusions to emerge from the Strategic Defence Review was the need for a radical reappraisal of the way we carry out defence procurement. We spend some £9Bn a year on equipment, spares and stores. Despite previous efforts to improve our procurement process, many of our projects take longer and cost more to bring into service than we planned. The 1997 National Audit Office report on major programmes reported an average delay of 37 months, unchanged from 1996.

152. This is not only poor value for money but also brings operational penalties. The length of the procurement cycle means increasingly we are not keeping pace with the rate of technological change which in many areas is now commercially led. The 'Smart Procurement' initiative announced by the Defence Secretary in July 1997 was aimed at adapting our procurement processes to meet these challenges.

Current Weaknesses

153. Early work in the Review identified some common problems. These included the transfer of commercial and technical risk to contractors unable to absorb it, insufficient pricing pressure on inflation and the delays involved in decision-making on collaborative projects.

154. The consultancy firm, McKinsey, were commissioned to carry out an analysis of underlying weaknesses in the present procurement process and organisation. Their report confirmed that although there has been improvement, major weapons systems are still taking some twenty years to bring into service, costs continue to exceed planned levels and reliability and maintainability of new equipment frequently remains a problem.

155. A particular weakness has been a failure to strike the right balance between cost, time, and performance in the very early stages of a project. Insufficient investment in risk reduction at this stage has cost us dear later on. Other contributing factors have been a tendency to use the same approach to procurement for widely differing projects, failure to give project

managers sufficient delegated authority, and failure to provide properly targeted incentives to both contractors and staff.

Keys to Improvement

156. Working groups involving industrial representatives were also set up to look closely at ways of modernising specific aspects of our procurement practice. Similar messages emerged, emphasising the need for fuller early planning to allow faster development and production; a through-life approach covering both acquisition and in-service management; and more of a partnership between MOD and industry. Especially in areas of rapid technological change, we need to be prepared to take a more incremental approach, setting less ambitious targets for the initial capability of new equipment but followed with pre-planned upgrades. We also need to bear down on defence inflation by pricing contracts of up to five years in cash.

157. Two central concepts emerged. First, adopting separate procurement approaches for major and minor projects and for commodity and other low risk items. Second, that we should adopt a through-life approach to projects covering both acquisition and in-service support. To do this we will bring together the requirements, technology and evaluation, procurement and logistics functions into a single project team. The team would also include industry representatives except during competitive phases of the project.

158. We also propose to simplify our approvals procedures to allow greater responsiveness to technological change while preserving proper levels of scrutiny. There will be two rather than three major decision points in a project cycle. The first would be the launch of a project initiation phase which would involve spending up to 15% of cost to reduce risk and to develop an acquisition strategy looking right through to in-service support. This would be followed by the main investment decision on whether to proceed to demonstration and manufacture, involving international competition or collaboration if appropriate. Ministers will, of course, continue to take the decisions on larger or contentious projects.

Future Organisation

159. The Review concluded that MOD would, like most very large purchasers, continue to need its own specialist organisation for the core management of complex projects, although there is scope for outsourcing acquisition of more routine items and in some specific areas. But delivering the improvements outlined above will require radical changes in the Procurement Executive and in its relationship with the rest of MOD and the Armed Forces.

160. The central needs are to achieve greater clarity in internal customer/supplier relationships and greater flexibility in personnel matters without reducing the scope for interchange with the rest of MOD. This will be achieved by turning the Procurement Executive into a Defence

Agency and by creating a single, central defence customer in MOD headquarters. Since the Procurement Executive already meets many of the technical requirements of an Agency we hope that it will achieve this status by 1 April 1999 and we anticipate a reduction in its operating costs of around 20% by 2001/2.

Benefits

161. We expect these changes to lead to faster, cheaper and better procurement with improved in-service support and savings in through-life costs. It will take some time to realise their full potential as the greatest impact will be new procurement or projects at a very early stage. Nevertheless, we are determined to implement the reforms as quickly as possible and a full-time implementation team is being set up, including industry and consultancy assistance. Our initial estimate is that, over the next ten years, we should be able to achieve a reduction of some £2Bn in acquisition costs.



An artist's impression of the new ASTUTE class submarine.

(By courtesy of GEC Marconi Astute Class Ltd.)

Industry and Collaboration

162. The British defence industry is outstandingly successful and a vital national asset. It provides jobs for over 400,000 people and earns the country around £5Bn from exports each year. From a defence point of view a healthy and competitive industrial base is crucial to ensuring that we will be able to continue to procure the right equipment for our forces at competitive prices.

163. The Government's manifesto contained a commitment to maintain a strong British defence industry. The MOD will continue to support and promote defence exports within the

strict criteria which the Government laid down in July 1997 to avoid their misuse for aggression or internal oppression. The reduction in the scale of Western armed forces, including our own, following the end of the Cold War has naturally created difficulties for the industry. It needs to find new ways of exploiting defence technology and expertise in civilian markets. This is also important if we are to preserve a healthy defence technology base to support our future military needs.

164. For both reasons, fulfilling a manifesto commitment, the Government has announced proposals to set up a Defence Diversification Agency within the Defence Evaluation and Research Agency to foster, in partnership with industry, greater two-way technology transfer between the military and civil sectors. The details were set out in a consultative Green Paper (Cm 3861) published in March. Decisions on the way ahead will be announced when the results of consultation have been assessed. We will harness the opportunities offered by a Public Private Partnership to strengthen the Defence Evaluation and Research Agency's ability to continue to provide world class scientific research well into the next century.

165. The costs of high technology defence research and development and smaller national production runs also make it essential to secure long term competitiveness by achieving economies of scale through international collaboration and industrial restructuring. This logic applies equally to all our Allies and partners, to governments and to industry. For industry, long-term competitiveness is about survival.



Sea Harrier firing Advanced Medium Range Air-to-Air Missile (AMRAAM).

166. These pressures have already driven a dramatic and rapid rationalisation and concentration in the US defence industry, despite the relatively large size of its domestic market. On 9 December 1997, the United Kingdom, France and Germany declared that there was an urgent need for a similar restructuring to create an efficient and globally competitive European aerospace industry. It is primarily for industry to decide how this should be done but

the three Governments - now joined by Italy, Spain and Sweden - have launched an initiative to facilitate the process and to capitalise fully on the benefits that it can bring.

167. Wherever possible, European governments should harmonise the requirements of their Armed Forces and pursue co-operative solutions. This not only avoids unnecessary duplication of development and production costs but makes sound operational sense. As part of their initiative, the Defence Ministers announced on 20 April that they would give high priority to resolving a number of governmental issues - for example relating to security and intellectual property rights - which could hinder restructuring and would sign a Letter of Intent setting out a timetable for this on 6 July. The creation of a multinational organisation, OCCAR (*Organisme Conjointe de Co-operation en matière d'Armement*), involving Britain, France, Germany and Italy to undertake common procurement also has an important part to play.

168. The outcome of the Strategic Defence Review fully reflects the importance that the Government attaches to maintaining a strong and healthy British and European defence industry combined with a continuing commitment to competitive procurement. The Review's forward equipment plans include a range of major European collaborative projects including Eurofighter, Horizon frigate, and the Multi-Role Armoured Vehicle (MRAV). We will be seeking to ensure that there are realistic European options to be considered for our longer term requirements such as the replacement for the Tornado bomber and improved strategic air transport.



A computer-enhanced graphic showing the design of the Multi-Role Armoured Vehicle (MRAV).

(By courtesy of Eurokonsortium)



CHAPTER NINE

DEFENCE SUPPORT FOR THE 21ST CENTURY

169. The Strategic Defence Review has highlighted the future central importance of deployed operations and high technology equipment. Supporting and sustaining such operations and equipment, and exploiting to the full the military opportunities offered by new technology, depend vitally on our support and headquarter functions. Far from being an inessential 'tail', they are an integral component of our military capability. The Review has therefore sought to ensure that this is firmly focused on future needs and provided in the most effective and efficient manner, making use of modern techniques and, increasingly, on a Joint Service basis.

170. MOD has a good record on efficiency and innovation in achieving cost effective support. Over the decade, efficiency savings have accumulated to over £4Bn annually. Much of this achievement is attributable to internal improvements in the 'business' of defence support, including the creation of 44 Defence Agencies. The greater involvement of the private sector has also played a major role, whether through market testing and contracting out, the involvement of private finance or Public/Private Partnership. The Review has demonstrated the scope to achieve yet more, pursuing efficiency not on the basis of dogma but on a case-by-case judgement of what meets the operational need in the most cost-effective manner.

171. The Review has included a comprehensive and rigorous drive to generate additional efficiencies to help fund high priority improvements and further to improve value for money. Much of the work was carried out within the main operating divisions to which the bulk of the defence budget is allocated. Other work ranged across their boundaries. In addition to the Smart Procurement initiative, the examination focused on the organisation of MOD and the Armed Forces; the rationalisation of support tasks (pursuing a defence-wide approach wherever sensible); and our assets and infrastructure.

Organisation

172. The Review has incorporated a number of organisational studies aimed at rationalisation, reducing overheads and reinforcing the Joint Service approach to defence.

173. The Review has emphasised that we need to have a clearer long term vision of the way in which we expect our forces and their methods of operation to develop. It is also essential that this is a truly Joint Service vision. We will therefore be creating a Joint Defence Centre as the focus for this work. In particular, it will be responsible for the development of defence doctrine, providing the joint framework for more specific single Service doctrine. We intend this to become an international centre of excellence and we see one of its main roles as leading Britain's contribution to the development of military doctrine for peace support operations discussed in [Chapter 3](#).

174. The Permanent Joint Headquarters established in 1996 has conclusively proved its worth in the planning and conduct of operations, for example in Operation Bolton, our contribution to the response to Iraqi confrontation with the UN in Spring 1998. The responsibilities of the Chief of Joint Operations will be enhanced. The post will have increased authority for enhancing the training and preparedness of the Joint Rapid Reaction Forces and will have a greater voice in stating joint warfare requirements. Budgetary authority and responsibility will also be increased and the post will become a Top Level Budget holder in its own right.

175. Changes flowing from the Review will have a significant impact on the organisation of the MOD Head Office. These include the need to create a new central 'customer' for equipment and a streamlining of the budgetary structure. Together with a number of more minor efficiency gains in individual areas such as research management, defence intelligence, and information and communications services, these will result in a further slimming of the central organisation.

176. The Review has also identified scope for some wider organisational improvements and efficiencies. The Army's administrative structure in the UK will be reshaped. The administrative structure of Territorial, Auxiliary and Volunteer Reserve Associations will be adjusted to match that of the Regular Army. This will produce a closer linkage between the administration of Regular and Reserve forces as well as some running cost savings. We will be consulting widely on these and other changes to the TA.



RAF technicians changing the engine of a Sea King Search and Rescue helicopter.

Defence Support Activity

177. The Joint Service approach is fundamental to defence, not only in operations but in supporting them and preparing for them. As a result, many support activities are already undertaken on a defence-wide basis, either through a joint organisation or through a lead Service acting on behalf of all three. The Review will extend this approach, balancing it with the specific needs of the individual Services.

178. A new post of Chief of Defence Logistics will be created to assume overall control of the three separate logistics organisations currently supporting the Navy, Army and RAF, in order to develop them into a single organisation. This will be structured in a way which continues to respond to the specific needs of the individual Services but will also allow the maximum scope for the rationalisation of functions and processes on a defence-wide basis. This will be particularly important if we are to realise the benefits of smart procurement in the logistics area.

179. The Review has included a thorough re-examination of the structure and performance of the existing 44 Defence Agencies. This will contribute to the process of continuous development and to the achievement of substantial new efficiency gains crucial for the affordability of the defence programme. A significant part of these will be achieved through the further development of public/private partnerships.

180. The Review also identified opportunities for greater cost-effectiveness by changing the structure of a number of existing Agencies. We intend to concentrate responsibility for all

storage and distribution across defence in a single Agency from the early years of the next century. As preparatory steps, it is planned that a single Storage and Distribution Agency for all defence non-explosive stores will be set up in April 1999 (with closure of Naval Stores Depots at Rosyth and Colerne generating early savings), while defence-wide responsibility for the storage, processing and distribution of explosives will be concentrated in the Naval Bases and Supply Agency.



Checking uniform items prior to despatch from the Army Base Storage and Disposal Agency at Bicester.

181. A single Agency will also be created to repair and overhaul all military aircraft. This will amalgamate the Naval Aircraft Repair Organisation (responsible for helicopters) with the bulk of the RAF Maintenance Group Defence Agency (fixed wing aircraft). The new Agency will become a Trading Fund as soon as practical.

182. A new Defence Transport and Movements organisation will be formed in April 1999. This will bring together a number of separate staffs, to control all large-scale movements of personnel and materiel by land, sea and air. The Review has also identified new opportunities for commercial exploitation of aspects of the defence movements infrastructure, principally the Marchwood Military Port. The procurement and management of fuels and lubricants will also be centralised, and we expect substantial benefits from greater private sector involvement in the Government pipeline system.



The Royal Logistics Corps transporting armoured vehicles through Bosnia.

183. The Army equipment support area will be restructured to integrate operational, technical, contract and finance staff into multi-disciplinary groups planning and procuring support for the front line on a fully coherent basis. This will involve the absorption of the Army Technical Support Agency into the new organisation, which is itself a likely Agency candidate. The Army Base Repair Organisation will also be restructured with a view to its becoming a Trading Fund.

Assets and Infrastructure

184. In addition to fighting equipment, the Ministry of Defence holds very substantial assets principally in the form of stocks, land and buildings. Most are essential to defence output. But the Review recognised that insufficient attention had been paid in the past to keeping asset holdings to the minimum necessary level. Comprehensive reviews of stockholdings and the defence estate have identified major savings.

Stockholdings

185. Stocks have been substantially reduced since the end of the Cold War and 50 depots

have been closed. Nevertheless, MOD continues to hold some £8 Bn of missiles and ammunition and £11 Bn of other items (mainly spares and repairable equipment). These have been reviewed against changing operational and deployment plans and the principle that we should not hold stocks when industry can be relied upon to deliver within the warning time we judge would be available of a major conflict.

186. In some areas we need to rectify spares shortages. But more flexible provisioning methods which take full account of the costs of holding stock are likely to allow more of our peacetime and training stockholding requirements to be met directly from industry. At the same time, there is scope to expand and accelerate existing plans to dispose of surplus stock. On this basis the Review has set a new target of a 20% or £2.2 Bn reduction in the book value of holdings over the next three years. Although the market value of disposals will be limited, this will allow us to make substantial reductions in storage and distribution infrastructure.

187. Plans were already in place to drive down the cost of our future stock purchases by applying radical new business efficiency measures. But the Review identified scope for taking this further.

188. We will also be looking at the longer term scope for reducing war reserves of ammunition and guided weapons if procurement lead times can be brought below preparation times. This may, for example, involve stocking long lead components and materials rather than complete weapons or paying manufacturers for dormant production capacity, and these approaches may prove significantly cheaper than holding large stocks of complete weapons and avoid the need to replace life-expired stocks.

Defence Estate

189. Substantial savings from the defence estate, flowing from reductions in our force levels since the end of the Cold War, were planned before the Review began. The Review will strengthen strategic management of the defence estate as a whole to ensure that we make the best use of it for defence and maintain the pressure to achieve further rationalisation. But we also conducted a thorough re-examination of existing plans to achieve further early savings.

190. The bulk of the remaining MOD estate is militarily essential and heavily used training land in rural and often remote areas, generally of low commercial value. Many other sites also have relatively low disposal value given the specialised facilities and, in some cases, contamination problems arising from long periods of military use. The Review has therefore focused on high value properties, especially in the London area.

191. Most such sites meet long term operational requirements and cannot be economically replaced elsewhere. We have nonetheless looked very hard at our changing requirements and as a result we believe we should be able to double previously anticipated receipts over the

next four years to more than £700M. A wide range of properties across the country will be sold. In London, disposals will include the Duke of York's Headquarters in Chelsea; Chelsea Barracks will be reprovided (not necessarily on its present site) through a Public / Private Partnership; and we are drawing up a strategic development plan for our estate in the Greater London area.

Impact on the Environment

192. In implementing the Review, we will take environmental factors into account, including environmental appraisal wherever appropriate, and we will also continue to take part in wider Government initiatives such as green transport and energy efficiency. In particular, we will continue to place a very high priority on conservation of the defence estate, both of the natural environment and of historic buildings and archaeological sites. We are increasingly recognised as a caring landlord of an estate that includes about 250 Sites of Special Scientific Interest. The new arrangements for the strategic management of the estate will provide a focus for the further development of our environmental policies. We will consult environmental and conservation bodies as we determine our future rural estate strategy.

Impact on Employment

193. The reduction in the size of the Armed Forces and the drive for greater efficiency throughout the support area has led to considerable reductions in the total number of MOD's civilian employees over the last decade. This Review will not lead to further across-the-board reductions although there will be some reduction in civilian posts arising from specific measures and others may be re-located. There will be full consultation over these issues and staff will be kept informed as detailed implementation plans are developed to minimise uncertainty. Reductions will be achieved as far as possible through normal departures and adjustments to establishment. Compulsory redundancy will be kept to the minimum and appropriate compensation and outplacement help made available. We will also provide a comprehensive package of assistance for staff and their families who have to be relocated.

Efficiency Gains

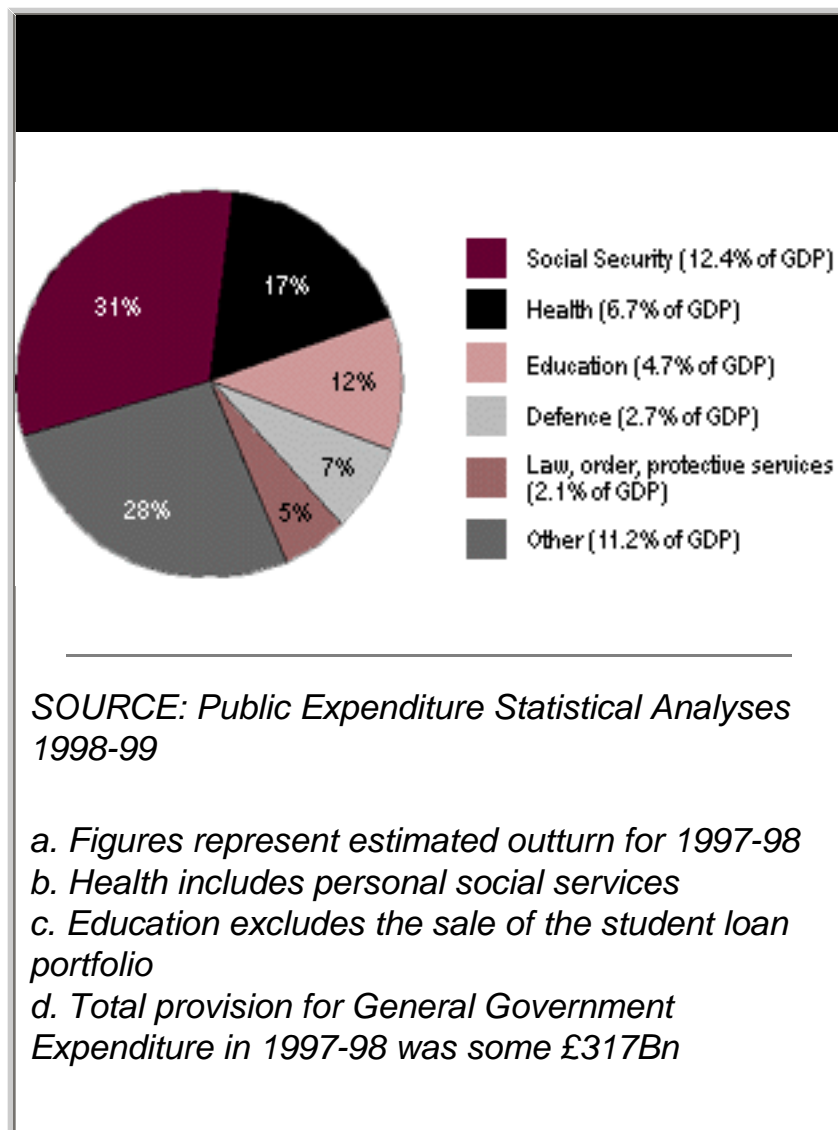
194. With the changes outlined in this Chapter, taken together with improved procurement, and a very wide range of individual measures built into management plans in all areas and at all levels, the Ministry has incorporated in its forward plans the target of achieving a 3% annual efficiency saving in operating costs over each of the next four years. This is a challenging target which will require us to identify substantial new efficiency gains in the years ahead over and above the measures identified in the Review. But we believe it is right to set such a challenge, to contribute to funding the planned improvements in capability as well as improving value for money in defence.



CHAPTER TEN

RESOURCES

195. This Review addresses the long term. If its plans are to be effective, they must be affordable. It is also vital to the confidence of the forces that the plans are properly resourced. And if defence is to command the support of the nation it must be seen as good value for money.



196. The plans set out in this White Paper require substantial investment to improve inherited areas of weakness measured against future operational needs. They also require us to fund a continuing major equipment modernisation programme to ensure that our forces cannot be out-matched and to enable us to benefit from new technology. The resources needed will come from savings generated within the Review.

197. Savings will come from rationalisation in the support area, an increased efficiency programme and smarter procurement. The Review's drive for greater effectiveness and better value for money in both areas has produced impressive results. In the longer term, procurement reform will produce major savings in both acquisition and in-service support costs. Savings will also come from reductions in some areas and programmes identified in the Review as of lower priority in the current strategic environment. As a result, defence expenditure plans for the next three years will be:

1999/00	2000/01	2001/02
£22,295M	£22,830M	£22,987M

198. Savings will build up gradually and there will need to be investment to remedy key weaknesses. By 2001/2, we expect that defence expenditure will be £915M a year lower in real terms than this year's budget. Taking account of one-off asset sales, however, the underlying effect is a reduction of some £685M. In an expanding economy, this is likely to mean that the defence share of GDP will fall from 2.7% today to 2.4%.



CHAPTER ELEVEN

CONCLUSION: MODERN FORCES FOR THE MODERN WORLD

199. The purpose of the Strategic Defence Review is to remodel Britain's defence policy and Armed Forces to meet the challenges of the next century. The Government's aim is strong, modern and cost-effective defence, now and for the longer term.

200. Strong defence provides our essential insurance against both short and longer term risks. NATO remains the foundation of Europe's and our own security. The Government will therefore seek to ensure that the Alliance maintains its credibility and effectiveness by adapting to new strategic circumstances. This requires us to continue to build positive security relationships with non-NATO countries and to maintain the effectiveness of NATO's collective security structure, including the development of a European Security and Defence Identity within the Alliance.

201. In an interdependent world, our security and safety is also tied up with wider security interests in international peace and stability. Here too, strong defence is the essential underpinning of a successful foreign policy. The importance of the role our forces can play in helping to build trust and reduce underlying causes of conflict, both in Europe and more widely, is reflected in the creation of the new Defence Diplomacy Mission. Our forces must also be able to back up our influence as a leading force for good in the world and meet our responsibilities towards the UN, by helping to prevent or manage crises. In the words of the UN Secretary General after this year's climbdown by Saddam Hussein, "You can do a lot more with diplomacy backed up by firmness and force". Ultimately, the Armed Forces must therefore be able to fight and win in modern conventional warfare.



The RAF Regiment guards a Tornado GR1 at Ali Al Salem air base in Kuwait during Operation Bolton.

202. Our forces contribute in many other ways to the community and our national life. Britain is rightly proud of its Armed Forces and what they have achieved. The Review maintains this tradition and seeks to develop it in line with the Government's wider objectives for a modern and forward looking Britain, for example through the investment we make in education and training, in research and development, and in support for defence industry and exports.

203. Our first priority in modernising our forces has been to maximise their effectiveness in today's strategic environment. A process of transformation has been under way since the end of the Cold War, and much has already been achieved. But the Strategic Defence Review has confirmed our view in Opposition that the transformation was incomplete, that it had taken some wrong turnings and left some vital capabilities inadequately resourced, that people had in some ways been neglected and that a more radical approach was needed in many areas.

204. The Review will reshape our forces to give them genuine utility for dealing with the problems of the future, rather than just an appearance of strength. A properly manned, well trained and more flexible front line will be complemented by more effective and more usable Reserves. One of our highest priorities will be the improvement of our defences against chemical and biological attacks on our deployed forces. We will also press ahead with implementing the Review's measures to improve our capability for overseas operations particularly through the creation of powerful Joint Rapid Reaction Forces, extra investment in essential enabling capabilities such as strategic transport, medical and logistic support, and the further extension of joint operational capabilities.

205. The Strategic Defence Review looks well into the 21st century because we need to provide the armed forces with a clear vision of their role in a changing world. The Review also looks a long way ahead because equipment being developed will be in service well into the next century, because capabilities given up today could take more than a decade to recreate,

and because the ethos and professionalism of our people are irreplaceable. It has not tried to predict the future decades in advance but to ensure that our defence plans are robust against a range of eventualities. The Review's plans are also designed to enable us to exploit developments in technology, training, tactics and strategy.



Vaccinating local people in Kenya as part of Exercise Sharp Point.

206. By 2015, the Review expects further major change in methods of warfare. Operations will no longer be characterised as land, sea or air. There will instead be a single battlespace in which land, maritime and air forces will be directed, targeted and supplemented by a new generation of intelligence, surveillance, information and communications systems offering a step change in military capability. But to take full advantage of this we will need to evolve new ways of organising and fighting. Above all, we will need highly skilled and adaptable personnel.

207. Success will depend even more than now on rapid and precise military action to achieve political objectives. And we can expect the advance of civil technology not only to drive what some call a revolution in vital areas of military capability but also to confront us with new and unconventional threats. The Review will continue the evolution of our forces to meet these challenges: well equipped and supported, designed for joint and multi-national operations and fully manned with highly motivated and skilled people.

208. By 2015, the Review plans a new generation of military equipment. This includes attack helicopters, long range precision munitions, digitised command and control systems, a new generation of aircraft carriers, submarines and escorts, the Eurofighter multi-role fighter and the development of a successor to the Tornado bomber. Our radical reform of the procurement process will also make it easier to exploit new technology as it becomes available.

209. The development of the joint approach to defence, integrating the resources and skills of the three Services and their civilian support to produce the maximum capability, runs through

all our plans. The Review has also emphasised that military effectiveness of modern armed forces depends more than ever on the quality of their logistic and other support. It has added impetus to the drive for extra effectiveness and efficiency, adopting and where necessary adapting modern means and best practice. In particular, the Review marks a major extension of Joint Service activity into the support area, including the introduction of a Chief of Defence Logistics.



*HMS SCEPTRE (foreground) on exercise with
HMS MARLBOROUGH.*

210. But the Review is far from a technological or equipment based vision. It has put people at the heart of its long term plans as well as tackling immediate problems of undermanning and overstretch. The challenges of the future will make it even more critical that we are able to recruit and retain the brightest and best for the Armed Forces and the Ministry of Defence. The Review incorporates long term personnel strategies aimed at making both military and civilian careers in defence more attractive, particularly through training and development. Crucially, it also provides a vision of defence relevant to the needs of our society in the 21st century.

Conclusion

211. The Strategic Defence Review has lived up to the Government's manifesto commitments. It has been based on our foreign and security policy needs in the new strategic environment. It builds on the strengths of our Armed Forces, remedies their weaknesses and provides a framework for a comprehensive process of modernisation which will:

- provide strong defence and long term security insurance;
- meet our national and NATO obligations;

- promote our wider foreign and security policy interests; and
- contribute to broader national objectives.

212. In short, the Strategic Defence Review will give Britain robust and modern defence at a reducing cost in real terms to underpin our foreign and security policies, now and well into the next century.



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAYS

- [*Foreword by the Rt. Hon. George Robertson MP, Secretary of State for Defence*](#)

- [Ministry of Defence Objectives](#)

- **Essay 1**
[*The Strategic Defence Review Process*](#)

- **Essay 2**
[*The Policy Framework*](#)

- **Essay 3**
[*The Impact of Technology*](#)

- **Essay 4**
[*Defence Diplomacy*](#)

- **Essay 5**
[*Deterrence, Arms Control and Proliferation*](#)

- **Essay 6**

[*Future Military Capabilities*](#)

- **Essay 7**

[*Reserve Forces*](#)

- **Essay 8**

[*Joint Operations*](#)

- **Essay 9**

[*A Policy for People*](#)

- **Essay 10**

[*Procurement and Industry*](#)

- **Essay 11**

[*Support and Infrastructure*](#)

[White Paper](#)

[Factsheets](#)

Essays

[Key Points](#)



STRATEGIC DEFENCE REVIEW

**FOREWORD BY
THE SECRETARY OF STATE FOR DEFENCE
The Rt Hon GEORGE ROBERTSON MP**



-
1. At the beginning of the Strategic Defence Review, I said that I wanted our conclusions "to have been formed and tested in a wider forum". The result was a unique process of consultation with the widest possible range of expertise in defence and related areas. This was the most open re-examination of Britain's defence ever conducted.
 2. Throughout the Review, I have been determined to extend the principle of openness, to reflect this Government's commitment to open Government and to encourage informed debate on all aspects of our defence policy. The Strategic Defence Review White Paper sets out the main themes of our work and the main conclusions we have reached. It cannot, however, address issues or explain the background to our conclusions in great detail.
 3. I have therefore commissioned this volume of essays, which fills in these details for the key strands of the Review. It is not comprehensive; our work covered so much ground that this would be impossible. But it does address what I believe to be the main aspects of this work. In some respects, including the essay on the policy framework, it reflects very closely the papers considered by Ministers. I am also taking this opportunity to publish for the first time the Ministry of Defence's objectives.
 4. The Strategic Defence Review set out to provide Britain's Armed Forces with a new sense of

clarity, coherence and consensus. This volume of essays will, I believe, demonstrate how we achieved our goal and contribute towards a much wider shared vision of Britain's security needs.

A handwritten signature in black ink, appearing to read "George Robertson". The signature is fluid and cursive, with a distinct flourish at the end.

Ministry of Defence

July 1998



STRATEGIC DEFENCE REVIEW

MINISTRY OF DEFENCE OBJECTIVES

Objectives

The objectives of the Ministry of Defence are to provide the defence capabilities needed:

- to ensure the security and defence of the United Kingdom and the Overseas Territories, including against terrorism;
- to support the Government's foreign policy objectives, particularly in promoting international peace and security.

Supporting Objectives (grouped by outputs)

Department of State:

- to produce a defence strategy, policy and programme matched to our security needs now and in the future;
- to help dispel hostility and to build and maintain trust through defence diplomacy, and to play an effective and leading part in support of NATO, the Western European Union and the United Nations;
- to provide clear and timely strategic direction on the participation of UK forces in conflict prevention, crisis management and operations;
- to allocate available resources in the way which maximises military capability and other Departmental outputs;
- to encourage the competitive strengths of British defence suppliers and, within the framework of the Government's arms sales policy, to support British defence exports.

Military Capability:

- to bring together maritime, ground and air components into coherent joint forces under unified command fully capable of achieving the Government's strategic objectives;
- to deliver appropriately motivated, manned, trained and equipped force packages, at the required level of readiness, and with the necessary support, sustainability and deployability, to achieve the full range of agreed military tasks.

Equipment Programme:

- to procure equipment which most cost-effectively meets agreed military requirements.

Success in achieving these objectives depends upon:

- being a good, equal-opportunity employer offering a clear sense of purpose and able to attract recruits and retain well-trained personnel;
 - seeking value for money in every activity of the MOD and the Services;
 - communicating effectively, internally and externally, why defence matters and the tasks of our forces and the civilian personnel who work with them.
-



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY ONE

THE STRATEGIC DEFENCE REVIEW PROCESS

The Aim of the Review

1. The Strategic Defence Review was announced in the Queen's Speech on 14 May 1997, and subsequently launched by the Defence Secretary at a press conference on 28 May:

"Its aim is clear cut; to build on the developing consensus on defence and to establish the widest possible shared vision about Britain's future security needs and the tasks of its Armed Forces to provide Britain's Armed Forces with a new sense of clarity, coherence and consensus."

The Nature of the Review

2. It was fundamental to the Government's approach that the Review would be foreign policy-led. The Ministry of Defence and the Foreign and Commonwealth Office would work together to establish a policy framework upon which the Review would build. The process would be open and inclusive, not conducted in secret behind closed doors. It would include consultation with the widest possible range of outside expertise and opinion. More generally, the Defence Secretary encouraged and welcomed suggestions and ideas from any source. He explained that:

"I want our conclusions to have been formed and tested in a wider forum, and to be accepted as the right defence policy for Britain No-one should be able to claim at the end of the Review that they were not given the opportunity to have their say."

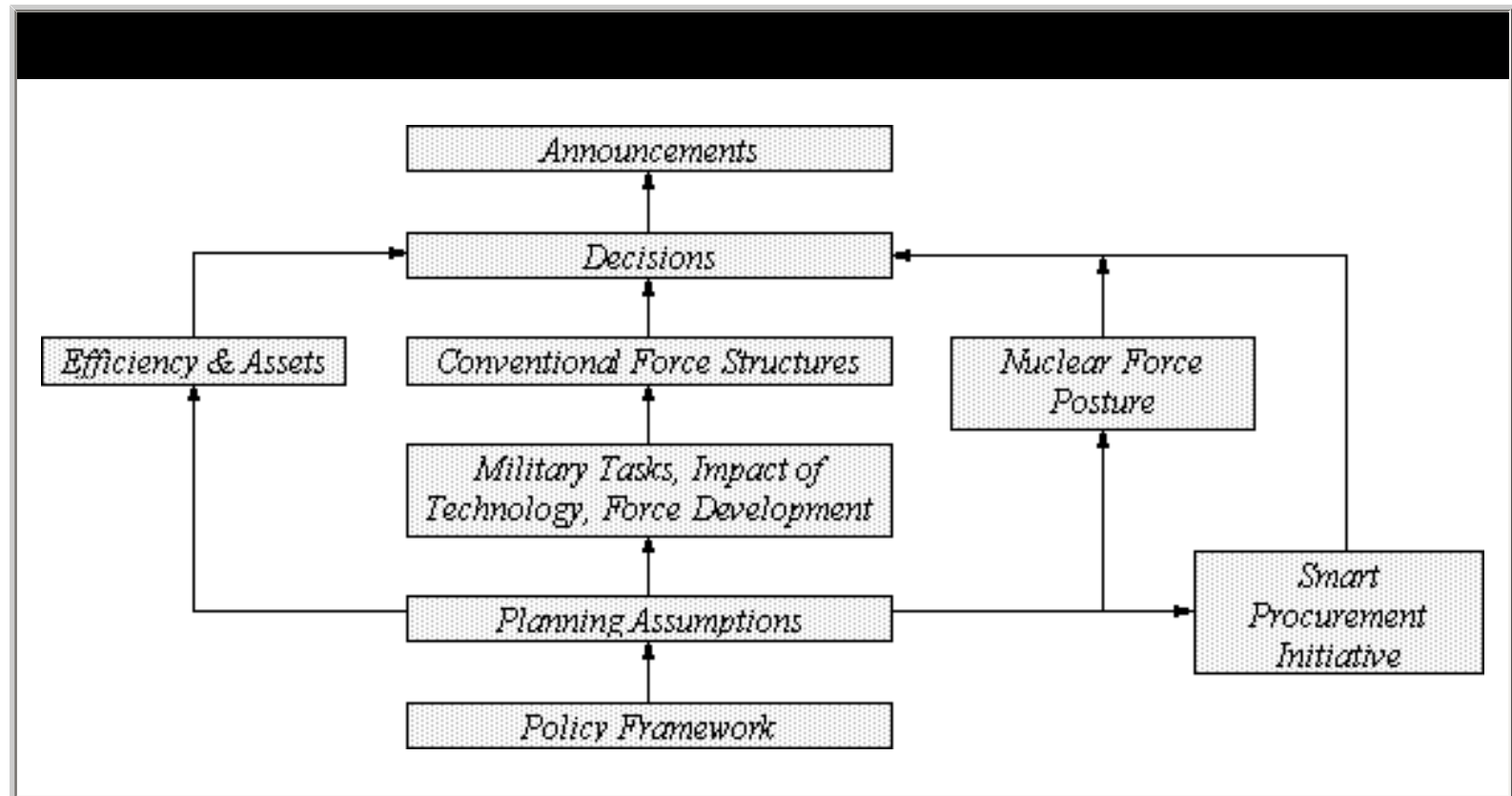
Parameters

3. The Review did not start with a blank piece of paper, but operated within parameters set out in the Government's General Election manifesto, including strong defence, security based on NATO, and retention of Trident combined with multinational arms control. The Defence Secretary also stressed the vital importance of people:

"... although our ships, tanks and jet fighters may appear impressive, it is the men and women who operate, maintain and support them who really make the difference. This Government will give its full support to Service personnel, their families, and our civilian staff."

4. Within these guidelines, the Review took a fresh look at all aspects of defence policy and programmes.

5. The Review was conducted in overlapping stages as shown in *FIGURE 1*.



6. Throughout this process, we were guided by the principles of:

- openness - keeping our own people, Parliament, our Allies and partners, the wider defence community and the public in touch with progress;
- maximum use of existing structures - drawing on the expertise of our in-house staff, rather than setting up a separate Review team;
- the widest possible involvement within the Ministry of Defence, the Government as a whole and more widely.

7. Most of the work was carried out in working groups, comprising military and civilian personnel

and representatives of other Government Departments, under an overall structure managed by the Vice Chief of the Defence Staff and the Second Permanent Secretary. Examples of the working groups are at [Annex A](#). The results at each stage were synthesised for discussion by a range of senior committees, up to and including the Defence Council. This approach was based firmly on the principles set out above, drawing upon the Department's existing structures and working practices where appropriate.

The Policy Framework

8. The first stage of the Review was conducted jointly by the Ministry of Defence and the Foreign and Commonwealth Office. It assessed our national interests, commitments and responsibilities, and considered potential risks and challenges in the decades ahead, and set out the overall role of defence in support of Britain's foreign and security policy, to provide the framework for subsequent stages of the Review. This work is summarised in the [essay on the Policy Framework](#).

9. To inform this work and test emerging conclusions, the Foreign and Defence Secretaries held two open seminars on 3 and 11 July 1997, in London and Coventry. These were attended by Members of Parliament, academics, representatives of non-Governmental organisations, and the media, in addition to Ministers and officials.

10. The Policy Framework was endorsed by Ministers as a basis for further work. We subsequently considered publishing it as a separate document. But our conclusion was that this work could not easily be separated out from the Review's later stages. The Defence Secretary decided nonetheless that it would be right to make public the broad conclusions we had reached so far, and the main themes were set out in his speech to the Royal United Services Institute on 18 September 1997, and in the Defence Debate in the House of Commons on 27 and 28 October 1997.

Planning Assumptions

11. Planning assumptions convert policy into detailed guidance for defence planning. They cover the activities our forces need to be able to undertake, and the context in which they will undertake them. The assumptions then inform further work to identify the specific force structures, capabilities, equipment and support required. This phase was carried out in broadly-based working groups. The main elements of the planning assumptions are summarised in the [essay on Future Military Capabilities](#).

Conventional Forces

12. On the basis of the planning assumptions, our requirements for conventional forces were

considered, in two main phases. Firstly, the eight missions identified by the planning assumptions were developed further into 28 Military Tasks, and additional work was carried out on the future development of specific capabilities and the impact of technology on future military equipment and capability. This work was again conducted in working groups, and took account of external submissions made to the Review and a third seminar, held in the Ministry of Defence Main Building in November and attended by outside experts and members of the public.

13. The second phase assessed the forces, capabilities, equipment and support needed to conduct the Missions and Military Tasks. It was by some margin the largest phase of the Review. The working group structure was retained, but a number of senior officers and officials were given responsibility for ensuring that the work of the groups rigorously analysed the issues and considered imaginatively the options which might be pursued. Ministers directed that no options should be ruled out.

14. The process was iterative, with issues and options considered at various stages by senior committees and Ministers, including a Steering Group chaired by the Minister of State for the Armed Forces. Once the full range of options had been established they were costed. The outcome of this phase of the Review is covered in most of the following essays.

Nuclear Forces

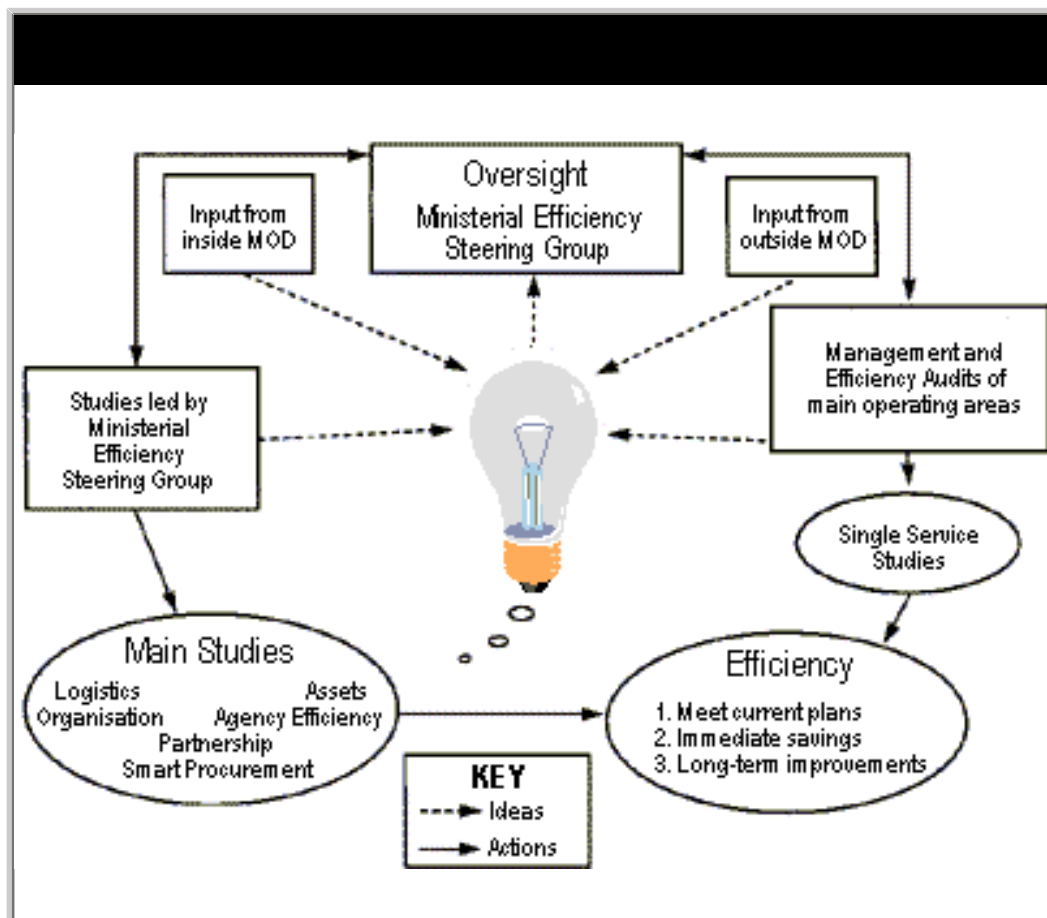
15. The Government's undertaking to retain Trident provided one of the pillars of the Review. Against this background, work on nuclear forces reassessed all aspects of our nuclear deterrent posture in the light of our essential security interests and defence needs. Working groups looked at the long term worst case requirement over the lifetime of Trident and considered how our nuclear deterrent capabilities and requirements for conventional supporting forces could be adjusted to meet Britain's needs in the changed strategic environment. Their conclusions are addressed in detail in the [essay on Deterrence, Arms Control and Proliferation](#).

Procurement Policy

16. On 30 July 1997, the Defence Secretary announced that the Strategic Defence Review would include a "Smart Procurement" initiative to ensure that future equipment procurement was faster, cheaper and better. Ministry of Defence staff worked with industry to identify a package of measures to lead to speedier, more coherent processes, improve the operation of the Department's internal organisations and mechanisms, and improve its relationship with industry.

17. In order to get maximum benefit from Smart Procurement, the initiative included a fundamental review of the process by which MOD acquires equipment, and the way the Department is organised to conduct that process. Every facet of the procurement process was examined, drawing on a wide range of outside expertise and experience, including the National Defence Industries Council and Trade Associations. There was also an open seminar at Didcot.

Work was overseen by a Ministerial Group chaired by the Parliamentary Under Secretary of State, and is described in the [essay on Procurement and Industry](#).



Efficiency and Assets

18. Although the Review was firmly policy-led, it also took a hard look at how the Department could ensure best value for money from defence resources. Every area of defence business was examined with the aim of seeking out new efficiency savings. One of the main aims was to make financial headroom so that we could rectify shortfalls in capability and meet new requirements identified in other areas of the Review. To this end, a specific strand of work was established to maximise the efficiency of our organisational structures and working practices, especially in the support area. This work was overseen by the Ministerial Efficiency Steering Group chaired by the Minister of State for the Armed Forces. The process is illustrated in *FIGURE 2* and is described in detail in the [essay on Support and Infrastructure](#).

External Inputs to the Review

19. Ministers directed that maximum use should be made of the knowledge and expertise of our

military and civilian staff. To reinforce this, we actively sought ideas and suggestions from all sources. The aim was an open, inclusive Review which would encourage a better informed debate on defence issues and help build a wide consensus on defence policy.

20. The Strategic Defence Review was a unique exercise in consultation on defence. In addition to the open seminars described elsewhere in this essay, the Secretary of State invited anyone with an interest in or a view on defence to make a submission to the process. Over five hundred submissions were received, from MPs and Peers, local authorities, academics, industry, interest groups, journalists, and members of the public. They were circulated to staff dealing with the subjects to which the submissions related. All were interesting and some had a significant impact on our work. Correspondents received an acknowledgement and will receive substantive replies in the light of the results of the Review.

21. Submissions were also encouraged from Service and civilian personnel, to ensure that we took advantage of the experience and imagination of staff who might not be directly involved in any of the Review's work processes. About a hundred such submissions were received.

22. In a related initiative, the Secretary of State set up a panel of eighteen outsiders with a range of interests and experience in defence and other areas. His purpose was to seek advice from different perspectives, and to test the conclusions emerging from the work. Several of the members also made valuable contributions to the work on efficiency, assets and procurement. Membership of the expert panel is shown at [Annex B](#) to this essay.

23. To spread the net even more widely, a series of informal discussions was held with former Defence Ministers, retired senior officers and officials, industrialists, trade unionists, academics, former and current MPs, Peers, scientists, non-Governmental organisations and environmentalists. These occasions promoted free and wide ranging discussion, and the views expressed were fed into our work. *FIGURE 3* shows the inputs to the SDR.



Consultation and Information

24. The Department sought to maintain a two-way flow of information on the Review with all interested parties. Parliament had opportunities to express views, in the House of Commons Defence Debate on 27 and 28 October 1997, and in the House of Lords on 6 November. There was also an adjournment debate in the House of Commons on 25 February 1998. Copies of outside inputs were placed in the libraries of both Houses of Parliament (subject to their authors' consent). The House of Commons Defence Committee received briefings to keep them up-to-date with emerging findings. During this period, Defence Ministers also answered over one hundred and fifty Parliamentary Questions on the Review, in addition to correspondence and enquiries from MPs and Peers.

25. From the outset we were committed to keep our NATO Allies and other partners informed of what was happening. The NATO and WEU Secretary Generals, Defence Ministers of NATO Allies, and Five Power Defence Arrangements and Gulf Co-operation Council countries were all kept informed in letters, and at a broad range of NATO and bilateral meetings.

26. Throughout the Review process a range of methods were used to keep the wider public in touch with progress. The Defence Secretary made keynote speeches at the Royal United Services Institute on 18 September 1997 and at Chatham House on 12 March 1998, and wrote an article for *The Independent* on 30 July 1997. Regular press releases were given to the national and regional press, and the text of key speeches and summaries of the seminars were made available on the Ministry of Defence Internet site [<http://www.mod.uk>]. A BBC television documentary on the process was broadcast on 31 May.

27. To keep Service and civilian staff up to date regular articles were published in our various in-house journals. These were supplemented in February 1998 by a short leaflet issued to all personnel with their pay-slips.

28. A key part of the consultation process was the establishment of a liaison team to talk directly to military and civilian personnel throughout defence. The team was led by a Group Captain and included representatives from all three Services and the Civil Service. They listened personally to views expressed by individuals at all levels, who were encouraged to speak frankly, and reports were made directly to the Defence Secretary. It was impossible for the team to speak to every employee, but their visit programme provided over 7,500 staff with an opportunity to discuss the Review and make their views known. It also gave Ministers a valuable insight into many of the issues of most immediate concern to Service personnel and civilian staff.

29. The MOD engaged the Trade Unions fully in this process of consultation. They were invited to

put forward general views at the outset, and officials kept them informed of developments throughout the Review, including through the MOD Whitley Council machinery. Trade Unionists were also actively involved in other aspects of the consultation process, including informal meetings and seminars. In March 1998 the Trade Unions were given a broad indication of emerging conclusions, and this was followed up with a meeting with the Defence Secretary on 7 April 1998 where they were able to feed in their views before decisions were taken. When final decisions are implemented the Trade Unions will be fully consulted in accordance with normal Departmental procedures.

Synthesis and Decision-Making

30. Options generated by the Review were submitted to Ministers after consideration by the various official bodies described above. Other Government Departments remained involved in this process, including through an inter-departmental group chaired by the Cabinet Office.

31. In the early part of 1998, the Defence Secretary held a series of meetings with his Ministerial colleagues, the Chiefs of Staff and senior officials, to consider the costed options identified by the working groups and to discuss the issues with those who had led the work in each case. The purpose of these meetings was not to take immediate decisions, but to discuss the issues with senior advisers, particularly the Chiefs of Staff, to commission further work where required and, progressively, to rule out options.

32. This rolling process enabled the Defence Secretary to ensure that the working groups had addressed the issues rigorously and imaginatively, and that the inter-connections between them had been properly identified and understood. As a result, the Defence Secretary and his most senior advisers were able to put together a coherent package of measures.

33. The Defence Secretary submitted these proposals to the Prime Minister on 27 March 1998. They formed both the output of the Strategic Defence Review and the MOD's input to the Government-wide Comprehensive Spending Review.

Announcement

34. We aimed to announce the conclusions of the Review as widely as possible. The main vehicles were a White Paper setting out the Government's defence policy and plans, and this volume of supporting essays. Allies and partners were fully briefed, and the Review's conclusions were also issued through press releases to national and regional press, set out in writing to a similarly wide range of people as contributed to the Review, and lodged on the Internet. Particular importance was attached to the internal MOD and Government wide announcements. Within MOD, 4,500 packs of information containing specially written information sheets were prepared to inform military and civilian staff of the main conclusions of the Review and how those conclusions would affect their particular area of business. Much effort was made to ensure that internal

briefing followed as closely as possible on announcements in Parliament.

Conclusion

35. This foreign policy-led, open and inclusive process clearly distinguishes the Strategic Defence Review from previous reviews. The results demonstrate the value of harnessing the knowledge, experience and ideas of the many rather than the few. We believe that this approach has produced a clear and coherent future for Britain's defence, and one which should command a broad consensus, not only amongst defence professionals but with the British public and our friends abroad.

Annex A to SDR Process Essay

EXAMPLES OF WORKING GROUPS

Planning Assumptions -

- future defence missions
- Allies and other partners
- potential theatres of operations
- capabilities of potential future adversaries
- scale and concurrency of operations
- readiness requirements
- sustainability and recuperation
- basing issues
- military crisis management
- rapid deployment forces and NATO reaction forces

Force Structures and Capabilities -

Nuclear Forces, including

- warhead and missile requirements
- Trident submarine operating posture
- nuclear disarmament/arms control
- fissile material management
- future warhead capability programme

Conventional Forces -

Utility of the present and planned force structure in relation to planning assumptions and military tasks, together with studies into specific areas such as:

- underpinning defence diplomacy
- a British contribution to UN standing forces
- Caribbean Presence
- Search and Rescue/Fishery protection

Size, shape and readiness, including:

- Force Structure requirements, particularly to provide Joint Rapid Reaction Forces
- Readiness
- Reserve structures
- Training and operational cycles and levels of separated service

Logistics Support, including:

- Logistics support to expeditionary and joint operations
- Sustainability

Organisation and Basing, including:

- Army Organisation
- Basing of the Army in the UK and Germany
- Command and Control of Contingency Forces
- Ground-based air defence and Nuclear Biological and Chemical defence
- Organisation of battlefield helicopters

Forward Equipment Issues, including:

- The forward equipment programme
- Strategic Lift
- Carrier-based aircraft, carriers and future offensive air systems
- Information and communication systems
- Future medium surface to air missile & ballistic missile defence

The return on our Investment in People

MEMBERSHIP OF THE EXPERT PANEL

- **Sir Michael Alexander** (UK Ambassador to NATO 1986-92, Chairman of RUSI)
- **Janet Bruce, Lady Balfour of Burleigh** (Consultant and Author, including Editor of *The Diaries of a Cabinet Minister* 1964-70 by Richard Crossman; Chairman of Cable and Wireless Resource Ltd.)
- **Janet Cohen** (Director of Charterhouse Bank Ltd and Governor of the BBC)
- **Professor Lawrence Freedman** (Professor of War Studies, King's College, University of London)
- **Air Marshal Sir Timothy Garden** (Former Assistant Chief of the Air Staff, now Director of the Royal Institute of International Affairs)
- **Lord Gladwin of Clee** (Former Regional Secretary GMWU; Member of the Employment Appeals Tribunal)
- **Dr. James Gow** (King's College, University of London; Expert Advisor to the Office of the Prosecutor, International Criminal Tribunal for the Former Yugoslavia (1994-97))
- **Professor Colin Gray** (Director of Security Studies, University of Hull; Formerly Director of National Security Studies at the Hudson Institute, New York)
- **Simon Jenkins** (Columnist of the Year 1993; Columnist for *The Times* and the *London Evening Standard* and formerly Editor of both newspapers)
- **Richard Laphorne** (Vice Chairman of British Aerospace plc and member of the Industrial Development Advisory Board)
- **Dr. Patricia Lewis** (Formerly Director of the Verification Technology Information Centre (VERTIC); now Director of The United Nations Institute for Disarmament Research (UNIDIR))
- **Admiral of the Fleet Sir Julian Oswald** (Chief of the Naval Staff 1989-93; currently Chairman of Aerosystems International)
- **Trevor Phillips** (Presenter of LWT's *The London Programme*, and weekly Columnist for *The Independent*)

- **Sir Michael Quinlan** (Director of the Ditchley Foundation; formerly Permanent Secretary at the Ministry of Defence 1988-92)
 - **John Rose** (Chief Executive of Rolls Royce plc)
 - **Dr. Alan Rudge** (Chairman, WS Atkins plc; Chairman of The Engineering and Physical Sciences Research Council; Chairman of The Engineering Council; and Chairman of ERA Technology Ltd.)
 - **Colonel Terence Taylor** (Assistant Director of the International Institute of Strategic Studies and Editor of *The Military Balance*)
 - **Field Marshal the Lord Vincent** (Chief of the Defence Staff 1991-2, Chairman of the NATO Military Committee 1993-96)
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SUPPORTING ESSAY TWO

THE POLICY FRAMEWORK

1. The Government's General Election Manifesto said that we would conduct a Strategic Defence Review "to reassess our essential security interests and defence needs [and] consider how the roles, missions and capabilities of the armed forces should be adjusted to meet the new strategic realities". The starting point was the Government's Manifesto commitments to a strong defence against post-Cold War security challenges, security based on NATO, retention of the nuclear deterrent combined with progress on arms control, and a strong defence industry.
2. The Review has been foreign policy-led and the first stage, conducted jointly by the Foreign and Commonwealth Office and the MOD, provided the policy framework for subsequent work. Its analysis and conclusions, which are summarised in this essay, were tested against a range of outside views, including in two open seminars.
3. For most of the post-war period, British defence planning was dominated by countering the massive threat from the Soviet Union and by the withdrawal from our overseas empire. There was little foreign policy choice in how we organised our security. That situation has been transformed by the end of the Cold War and by the new co-operative partnership with Russia and the countries of Central and Eastern Europe. The disappearance of the Soviet threat was a result, in part, of the effective system for collective defence in Europe which we played a key role in creating and maintaining. NATO has evolved to become a positive force for stability and confidence for the whole of Europe. We now have a real opportunity to devise a security posture which will support and underpin all Britain's interests overseas, in a world where democracy and liberal economic systems continue to spread.
4. The new challenges we face will call for the combined application of all the tools at our disposal - diplomatic, economic, trade, developmental, as well as the Armed Forces. In the changed world there is a new and growing role for preventive diplomacy which brings all these tools to bear to avert conflict before military intervention is required. However, this essay necessarily focuses on the defence dimension.

5. Britain's place in the world is determined by our interests as a nation and as a leading member of the international community. The two are inextricably linked because our national interests have a vital international dimension.
6. Britain is a major European state and a leading member of the European Union (EU). Our economic and political future is as part of Europe. British security is indivisible from that of our European partners and allies. We therefore have a fundamental interest in the security and stability of the continent as a whole, and in the effectiveness of NATO as a collective political and military instrument to underpin these interests.
7. Our economy is founded on international trade. Exports form a higher proportion of Gross Domestic Product than for the US, Japan, Germany or France. We invest more of our income abroad than any major economy. Our closest economic partners are the EU and the US but our investment in the developing world amounts to the combined total of France, Germany and Italy. Foreign investment into the UK also provides nearly 20% of manufacturing jobs.
8. British economic interests and our history give us other international responsibilities. Over ten million British citizens live and work overseas. We have 13 Overseas Territories spread around the world. We are members of many important international organisations and have developed close ties of friendship with countries in every continent. And as an open society, we are easily affected by global trends and other external influences.
9. A nation's foreign policy must reflect its values. Britain stands for a strong world community, where differences are resolved fairly and peacefully. Our national security and prosperity thus depend on promoting international stability, freedom and economic development. As a Permanent Member of the United Nations Security Council, Britain is both willing and able to play a leading role internationally. We have a responsibility to contribute to a strong world community. But we cannot achieve all our aims alone. Instead, we need to work through strong partnerships and alliances, particularly the EU and NATO. We also attach immense importance to the international community as a whole working together through the UN and other international organisations.
10. This is summed up in the four broad foreign policy goals outlined by the Foreign and Commonwealth Secretary on 12 May 1997:

Security of the United Kingdom and Overseas Territories and peace for our people by promoting international stability, fostering our defence alliances and promoting arms control;

Prosperity, promoting trade and jobs at home, and combating poverty and promoting sustained development overseas;

Quality of Life, protecting the world's environment and countering the menace of drugs, terrorism and crime;

Mutual Respect, spreading the values of human rights, civil liberties and democracy which we demand for ourselves.

Security Priorities

Support to the Civil Power

11. Support to the Civil Power in Northern Ireland has been a major task for our Armed Forces. The future of Northern Ireland must be determined with the consent of the people. The Government is committed to reconciliation between the two traditions and to a political settlement which commands the support of both. The Good Friday Peace Process marks a new beginning in this respect and the Government is committed to its success. We must, however, maintain the ability to combat terrorism of all kinds throughout the United Kingdom.

Europe

12. Changes over the last decade have radically improved the security context for Britain, but the collapse of Yugoslavia has shown how instability in Europe can escalate into conflict and spill over borders. Collective security based on NATO, the transatlantic link, and the continuing development of a more effective European Security and Defence Identity in NATO through the WEU, continue to offer the best guarantee of deterring and insuring against new security risks in Europe.

13. Our military and political contribution to NATO is effective and highly valued. But because of increased operational commitments in support of foreign policy, many areas of our forces are now suffering from severe overstretch, with unprecedented short gaps between operational tours. This has effects on morale and retention.

14. It will remain in our interests to continue to play a leading role in the Alliance. If our contribution fell significantly, NATO's ability to undertake crisis management and peace support effectively would be reduced, our ability to influence NATO in ways which reinforce our security would decline and we would send a dangerous message to the US about Europe's willingness to share the burden of security in our region.

Overseas Territories

15. There are at present no immediate threats to these Territories. We must, however, be able to react to any emerging security problem and where necessary to assist the civil authorities.

Outside Europe

16. Outside Europe, our interests are most directly affected by events in the Gulf and the Mediterranean, and we have bilateral understandings with some Gulf States which carry the strong expectation of military support. Risks in these areas are likely to grow rather than decline. This does not, of course, mean that we need to recreate a standing or permanent military capability "east of Suez". Elsewhere the risks to our interests are either small or we have more choice over the level of our response, which would be generally in combination with others.

17. At the same time our planning needs to address new challenges: weapons proliferation, ethnic tensions, population pressures, environmental degradation, drugs, terrorism, crime and the failure of state structures.

18. These new sources of conflict can have a direct impact in Britain. Over 90% of the heroin on our streets comes from Afghanistan, where the civil war makes it impossible to tackle the problem at its source. In an increasingly interdependent world, such global problems can undermine the international structures on which we and others depend. With Britain's unusually wide overseas interests and assets, including the ten million British citizens overseas, we are particularly vulnerable. The number of such conflicts is increasing. In its first four decades the UN authorised 18 peace-keeping missions; in the past decade it has authorised a further 25.

19. We cannot turn our backs on the human suffering and economic and social damage which such crises cause. Our international stature and influence gives us a responsibility as well as an interest in responding to them. Our forces have a range of skills and capabilities which are particularly valuable in this context. Our primary means of tackling these problems are through preventive diplomacy and economic, social and developmental co-operation. However, military force, including its deterrent effect, can have a significant role to play when other forms of conflict prevention have failed.

20. There will be more calls on our Armed Forces to become involved in averting, managing or countering these new security challenges, with other NATO Allies or other countries. We should retain the ability to become involved when it is in our interest to do so and it will be important to have clear objectives, criteria for success and an exit strategy.

21. Our forces also make an important, often unsung, contribution to the spread of stability and democratic values through training and other forms of military assistance (now known as Defence Diplomacy); and through anti-drug operations at home and abroad.

22. Our own interests require the international community as a whole to support and contribute to actions to ensure international security. To encourage others to help shoulder the burden, Britain should take on a share reflecting the spread of our interests and our political leadership role, particularly in the UN Security Council.

The Defence Contribution

23. The Armed Forces make a major contribution to Britain's objectives in this rapidly changing world. They must not only be able to carry out the range of tasks which may arise from current priorities but also be sufficiently robust and flexible to cope with the longer term, when circumstances and priorities may change.

24. Our analysis has shown that to do this, our force structures and military capabilities need to be based on:

- ensuring European and therefore British security through a commensurate national contribution to the maintenance of NATO as a politically and militarily effective Alliance. This will include maintenance of nuclear deterrent forces (while pressing for multilateral negotiations towards mutual, balanced and verifiable reductions in nuclear weapons) and the ability to make an appropriate contribution to a regional conflict in Europe involving our NATO obligations, and retaining a framework on which it would be possible to rebuild over the longer term to meet a greater threat should one begin to emerge;
- keeping the ability to respond, in combination with others, to threats to our important interests, in the Gulf and the Mediterranean. At the upper end of risks this could require capabilities which are similar in scale and nature to those which would be required for a regional conflict involving NATO;
- providing support to the civil power in meeting internal security challenges in the United Kingdom and the Overseas Territories;
- responding to lesser risks to British interests beyond these areas and to other direct calls on our forces, including any threats to Overseas Territories, assistance to British nationals overseas, and support to wider British interests at home and abroad. In responding to many of these risks, we would normally seek to operate in conjunction with others. We would not expect to maintain additional forces or capabilities specifically for these purposes;
- supporting the Government's wider international responsibilities, including as a

Permanent Member of the UN Security Council, particularly in relation to the maintenance of peace, international order and stability, humanitarian principles and democratic rights. Tasks of this sort are likely to be increasingly important, and may require a demanding range and scale of capabilities, although participation in individual operations will generally be a matter of choice;

– helping to counter the risks from emerging global security problems such as proliferation, terrorism and international crime.

25. Our vital stake in European security, our very important interests in the surrounding regions and our wider international responsibilities could each involve us in modern, high intensity conventional warfare. In all these cases, we could face opponents equipped with powerful modern equipment because of the increasing proliferation of weapons and technology. We therefore need forces which are flexible, highly capable, mobile and responsive. Recent experience has also shown us that our wider international responsibilities are now involving us in peace support operations where success depends on deterring or out-matching indigenous forces. This again requires forces trained and equipped for demanding conventional warfare.

26. The work summarised in this essay formed the basis for subsequent stages of the Strategic Defence Review. We believe that all measures in the Review package are consistent with its conclusions.



SUPPORTING ESSAY THREE

THE IMPACT OF TECHNOLOGY

1. Technology and its application has been a high priority of the Strategic Defence Review, underpinning the themes of high capability forces and better value for money in defence. This essay looks at how, at a time of accelerating technological change, we can best take account of the impact of technology for defence purposes.
2. We need battle-winning forces to underpin our foreign and security policy. They must be able to make a distinctive, high quality contribution to multinational operations; and their equipment must give them a decisive technological edge over any potential opponent. If our forces are to remain contributors of quality to NATO and other multinational operations, our capabilities must be firmly at the high end of the technological spectrum and technically compatible with those of our allies. We must therefore ensure that we procure equipment based on high but proven technology.
3. Our Armed Forces must be able to conduct a wide range of operations, from high-intensity combat to peacekeeping. The MOD must also contribute towards the Government's wider objectives of building Britain's reputation in the international community, developing a skilled and well-educated workforce and providing opportunities for high technology work for British industries.
4. As scientific discovery and technological advance continue apace, so the military options available to potential aggressors increase. The military advantage will rest with those who most effectively identify and exploit battle-winning technology. This places a premium on the ability to generate and identify opportunities; adopt them for military use; and integrate them rapidly into platforms, weapons systems and force structures. Britain must therefore maintain an agile and effective research and development process.
5. It is the very pace of technological advance and the associated explosion of opportunities which makes it unlikely that every opportunity can be exploited. Hard choices will be required to cope with the wide range of possibilities within a limited budget. We must therefore focus on areas where we can really make a difference, such as communications and information

systems, improved explosives, better sensors and improved simulation.

Changing Technology

The Pace of Change

6. Military planners have sometimes been slow to recognise, and the procurement process slow to exploit, the opportunities offered by advances in technology. With the accelerating pace of change we shall need to be especially alert to this issue. Moreover, whereas advances in science and technology for military purposes have historically had applications in the civil market, new advances in the civil market are increasingly having profound implications for our future military capability.

7. In electronics, software and information technology generally, civil investment in research and development is ten times greater than defence investment. The computing power of state-of-the-art systems is doubling every 18 months or so; this implies around a 100-fold increase over ten years. The impact of these developments will be all-pervasive because of their use in the vast majority of modern military systems. We have to accept that in these areas it is difficult to predict where technological advances may lead for more than about five years in the future. Nevertheless, the Smart Procurement initiative will ensure that fast moving technologies can be quickly developed to maintain the capability of in-service platforms and systems through technology insertion, thereby guarding against obsolescence.

8. If we are to meet our foreign and security policy objectives, we must also be able to operate on terms of broad technological parity within multinational operations, most probably involving the United States, and to counter opponents exploiting freely available civil technologies. Although we may be forced to replace or upgrade systems dependent on fast-moving technology (weapons, sensors and communication equipment) more frequently than in the past, platforms are likely to retain their operational edge for longer because the technologies on which they depend (materials, structures and propulsion) will probably advance less rapidly, and because they will be designed to accommodate updates. Thus the balance of investment will shift from platforms in favour of the progressive update of in-service equipment.

The Revolution in Military Affairs

9. The biggest change in the conduct of future military operations is likely to come not from the weapons alone but from the application of information technology to military command and control. There is a growing body of opinion, particularly in the US, that we are approaching a 'Revolution in Military Affairs' in which we will see a step change in military capabilities resulting from the synergistic combination of long-range precision weapons with networks of advanced sensors and data processors. Radically improved capabilities in the field of information processing and communications systems will increase situational awareness

(knowing where hostile and friendly forces are, and where they are not) by combining information from all available sources and rapidly distributing it to those who need it, thus permitting more effective and efficient use of our forces. Smart long-range precision weapons will enable us to attack targets accurately from distance, thereby reducing our own and civilian casualties.

10. Leaving aside the academic debate on whether or not a revolution is underway, it is clear that exploiting these technologies will lead to significant improvements in military capability. They will inevitably be led by the US. If Britain and other Allies can successfully tap into these developments, the result will be more effective coalition operations. Conversely, there is potential for multinational operations to become more difficult if compatible capabilities are not preserved. This could lead to political as well as military problems. Our priority must therefore be to ensure that we maintain the ability to make a high quality contribution to multinational operations and to operate closely with US forces throughout the spectrum of potential operations. To do this we may need to be selective about the technologies we develop nationally or on a European basis, and be prepared to use US technologies in other areas in order to continue to make a leading contribution to multinational operations.

11. Keeping pace with the US is not solely dependent on funding. We are already talking to the US Administration about the policy implications. In parallel we will need to ensure that doctrine is developed to take full advantage of the potential of developing technologies.

12. Our forward equipment programme contains a range of projects which will exploit key technologies. These include the airborne stand-off radar (ASTOR) surveillance system; and our indirect fire precision attack programme which will provide a range of smart, long-range, guided weapons delivered by rockets or extended range artillery. Long-range airborne systems include the Brimstone, Storm Shadow and Hellfire missiles. In addition, our Joint Battlespace Digitisation initiative is fundamental to our future defence capability. This initiative aims to improve operational effectiveness by integrating weapons platforms, sensors and command, control, intelligence and information systems. It takes account of current work in the same field by the US and other NATO Allies to ensure that the communication and information systems crucial for future multinational operations will be compatible. The programme also reflects the perception that by 2015, military operations will no longer be characterised as sea, land or air, but will merge into a single battlespace in which the ability to conduct joint and combined operations will be fundamental.

13. The increasing dependence on high technology to ensure that our forces maintain the ability to fight and win when called upon may encourage some potential adversaries to adopt alternative weapons or unconventional strategies ('asymmetric warfare'). Our future plans will need to guard against introducing new weaknesses which aggressors could exploit and ensure that we have the capability to combat or defend against alternative weapon systems.

Human Factors

14. The design of defence systems must take account of the capabilities and limitations of the people who will operate them. The principle underlying the application of technology in this area is to build on human strengths and mitigate human weaknesses. Development of improved detection, countermeasures and treatments for victims of increasing threats, such as chemical and biological warfare, is being addressed. There will also be a continuing need to provide lightweight protection against explosive blast and fragments, as well as against environmental extremes such as heat, cold and vibration.

15. New equipment is also changing the role of people in battle. Technology offers the potential for reducing the exposure of personnel to situations of greatest risk, for example by allowing unmanned platforms to carry out roles previously requiring manned solutions. The most likely early application is in the use of unmanned aerial vehicles for reconnaissance. Our Phoenix programme is an important step, and we are committed to investigating the potential for their wider application. Other examples are the use of remote controlled unmanned vehicles for land and sea mine clearance, and the increased use of stand-off weapons. The increased automation of tasks can, however, isolate personnel from each other and from direct contact with the battle and potentially reduce their situational awareness. These issues must be understood and taken into account by such programmes as Joint Battlespace Digitisation.

Information Vulnerability

16. Greater integration of information systems has major benefits, but it also introduces new risks and offers new opportunities for an adversary to attack our information networks, thus degrading the fighting effectiveness of our forces. We will continue to invest in high quality research and development to ensure that we are at the forefront of this technological challenge.

17. The threat to information infrastructures is not just a defence issue. We are therefore working with other areas of Government, our allies and suppliers of key services to ensure that security policies and technical solutions match the developing nature of the infrastructure. We will provide appropriate resources to improve our ability to protect defence information networks, to deter those who would attack them and to provide an immediate warning of attack in order to counter and recover from such attacks. We will vigorously test these arrangements, make changes to policies and procedures where necessary, and provide training and education to assure the security and availability of information vital to the conduct of defence.

Modelling and Simulation

18. Increasingly sophisticated and accurate computer modelling techniques are transforming systems development and training. They are reducing development time and cost by cutting the number of prototypes required, and improving the efficiency and effectiveness of designs.

Advanced simulation also allows the computer-based representation of complex equipment and scenarios for operational and tactical training, and provides mission rehearsal and decision-making tools. This has the added advantages of reducing the number of expensive munitions expended in training, the wear on warfighting equipment and the use of training areas, and could eventually lead to a requirement for fewer items of equipment.

Reliability

19. Civil equipment has become significantly more reliable in recent years, chiefly as a result of better manufacturing methods based on quality management and systems engineering. Our aim is to harness civilian best practice and apply it to military equipment. More reliable systems, which are easier to maintain and sustain in the field, will lead to a greater proportion available for operations at any one time. This too should mean that we can reduce the total number of systems required.

The MOD Response

20. In its Manifesto, the Government pledged to nurture investment in new technologies. As part of this process, the Strategic Defence Review has re-examined and confirmed the importance of technology in defence.

21. Excellence in specialised military fields, such as stealth, sensors, electronic warfare and guided weapons, will be essential, but there will also need to be closer links with the areas of civil technology described earlier. MOD will need to fund research aimed at incorporating the best of civil technology into military systems. Dual use (civil and military) research, in collaboration with industry, will be an important theme, as will increased international research collaboration.

Technology Strategy

22. The MOD, in discussion with industry, has produced a formal technology strategy, first published in May 1996, aimed at maximising access to the science and technology that is available worldwide. The intention is to develop the MOD technology base in those areas most likely to enhance defence capability. The strategy guides the formulation, in consultation with the Defence Evaluation and Research Agency (DERA), of a research programme designed to close the gap between the capabilities provided by the existing technology base and those required in the future. Our objectives are:

- to ensure that MOD has access to impartial high quality technical advice so that it can act as an 'intelligent customer' and obtain value for money in procuring higher technology equipment;

- to enhance the ability of industry to respond cost-effectively to MOD's equipment requirements;
- to facilitate collaboration and research planning with industry, other Government departments and Allies; and,
- consistent with defence aims, to contribute to Britain's overall prosperity.

23. The technology strategy provides a stable basis for the longer term planning of MOD's research programme, thus enabling other Government departments, industry and others to make plans accordingly. The strategy will, however, be updated at intervals in the light of changes to the military threat, technological opportunity and the views of stakeholders.

Technology Transfer

24. The MOD makes an important contribution to technology transfer to industry. Each year we spend over £2Bn on defence equipment development, including some £450M on research with the DERA. Technology transfer is, of course, a two-way street and the MOD also benefits from industrial developments in the world market. It is these mutually beneficial processes which we would like to enhance.

25. The Government's Manifesto said "we support a strong UK defence industry, which is a strategic part of our industrial base as well as our defence effort". In furtherance of this pledge, the Defence Secretary has re-invigorated the National Defence Industries Council, of which he is Chairman. One of the actions being taken forward under the Council's auspices is the preparation of a wider national technology strategy.

Defence Diversification

26. The main goal of technology transfer to civil industry is to accelerate and widen the diffusion of defence originated technology and techniques into the broader economy. This is easier said than done, and several reports produced by the Defence and Aerospace Panel of the Technology Foresight Programme have emphasised the need for better harmonisation of technical priorities between government, industry and academia.

27. We therefore see considerable value in fostering dialogue and networking amongst the Government, industrial and academic communities that formulate and deliver research programmes. Part of the expertise thus generated can be extended to civilian use more efficiently than at present, and we published our proposals for doing so in March 1998, in the consultative Green Paper 'Defence Diversification - Getting The Most Out Of Defence Technology' (Cm 3861). The centrepiece of these proposals is to set up a Defence Diversification Agency.

28. The Agency would provide a focus for information on what is available, stimulate access to Government expertise and facilities, and encourage collaboration. It would also provide a confidential database of future defence needs, to enable companies to consider how their technology could be applied to defence, or to target research and development to meet known future markets. We believe that this will help to strengthen the technology and manufacturing base, thereby securing the capacity to provide our future equipment needs, and to sustain manufacturing output and employment in accordance with the Government's broader objectives.

International Collaboration

29. International operations have become the norm, and the Armed Forces regularly train alongside our allies to hone their interoperability. It clearly makes sense to have consensus on what the key technologies of the future are and how interoperability will be maintained. MOD intends to ensure that such a consensus exists by maintaining the strong international links between both military and policy making staffs. To stimulate debate both within Britain and internationally, we intend to publish periodic reports on how emerging technologies worldwide could affect future military operations.

30. International collaboration offers access to the 95% of scientific research conducted overseas. Collaborative research, currently involving more than 20 countries, is an essential part of our technology strategy. It contributes to both the breadth and quality of the MOD technology base, improves the value for money obtained from defence research, leads to greater commonality in operational requirements and helps to achieve improved interoperability with our allies. Britain has a great deal to offer, with world-class technology and expertise in a number of fields, such as in the detection of biological warfare agents and in avionics systems. We can use this expertise to trade with other countries to our mutual advantage. Our strategy includes the identification and establishment of new collaborative projects with nations who possess a capability in those areas of advanced technology rates as a key for our future defence needs. With this aim in mind, it is our intention to maintain or increase our collaborative research activities.

Technology Demonstration

31. Technology demonstration is intended to reduce technical risk inherent in high-technology projects and to encourage the transfer to industry of technology derived from defence research. We intend to increase the use of technology demonstration and to involve the military user at an early stage in the evaluation of new systems, drawing on the lesson of the successful US model of advanced concept technology demonstrators.

Conclusion

32. One of the main lessons we have learned from our work on technology in the Strategic Defence Review is that in the future we will need to consider technology issues from a politico-military as well as a technical perspective. No country can hope to grasp every possible opportunity, but we have put in place the machinery to ensure that technology can be harnessed effectively for the Armed Forces. Our policy is to be able to make a distinctive, high quality contribution to multinational operations with equipment that is interoperable with our most advanced allies and has a decisive technological edge over our opponents. This presents a robust and ambitious goal for our use of technology which is given direction by a focused and coherent technology strategy.



SUPPORTING ESSAY FOUR

DEFENCE DIPLOMACY

1. Defence diplomacy is not a new idea. Britain's Armed Forces have a proud record of providing support to peacetime diplomacy. Ship visits, exchanges with other countries' forces and the training of foreign personnel are a long established part of daily military business. Since the end of the Cold War, all three Services and MOD civil servants have made an important contribution to improving relations with former adversaries in Europe and in promoting stability worldwide. They have built schools in Bosnia, helped feed refugees in Africa, monitored arms control agreements and conducted major exercises with Poland and the Ukraine.

2. In today's strategic environment, there is scope for doing much more. We must of course be able to deal effectively with crisis and conflict when it occurs. Equally important, however, is helping to prevent conflicts occurring in the first place. There is growing recognition internationally that bolder steps are required to forestall escalation into conflict, as reflected in the recent reports by Lord Carrington and the US Carnegie Commission. The Defence Secretary has described the contribution that Armed Forces can make to this process as 'defence diplomacy', and he has characterised its aim as disarmament of the mind.

A New Mission

3. To give new impetus to these activities and signal that they are now an important priority for defence, it has been decided to make Defence Diplomacy one of the eight core Missions which define the activities which we expect our Armed Forces to be able to undertake. This will ensure that defence diplomacy is properly linked to policy objectives.

We have defined the Defence Diplomacy Mission as follows:

To provide forces to meet the varied activities undertaken by the MOD to dispel hostility, build and maintain trust and assist in the development of democratically accountable armed forces, thereby making a significant

contribution to conflict prevention and resolution.

4. Three specific Military Tasks will contribute most directly to this new Mission:

- arms control, non-proliferation, and confidence and security building measures;
- Outreach, a new Military Task, designed to contribute to security and stability in Central and Eastern Europe, particularly Russia, but also extending as far as countries in the Trans-Caucasus and Central Asia, through bilateral assistance and co-operation with the countries concerned;
- other defence diplomacy activities, covering those military assistance activities with overseas military forces and defence communities not covered under Outreach.

Arms control, non-proliferation, and confidence and security building measures are addressed in the following essay.

Outreach - Building Bridges in Europe

5. Tension and conflict from Chechnya to Bosnia, and now in Kosovo, demonstrate that security and stability in Europe cannot be taken for granted. Britain's security depends ultimately on a secure and stable Europe. It is therefore in our interests that we remain actively committed to promoting peace and security throughout the continent.

6. The MOD's Outreach programme of bilateral defence assistance complements NATO's work to help promote a safer, more stable Europe. Britain will make a major contribution to NATO's initiatives. We will:

- continue to provide assistance to Poland, Hungary and the Czech Republic to ensure they are effectively and efficiently integrated into NATO's military structure;
- work hard, within NATO and outside, to ensure that those countries that are not NATO members do not feel isolated. We will place particular emphasis on improving our already close bilateral defence relationships with Russia and Ukraine;
- take a full part in NATO's Euro-Atlantic Partnership Council to develop political consultation and the Partnership for Peace programme which provides for military co-operation with NATO's 28 Partner nations. During September this year, Britain will host a major Partnership for Peace exercise - Exercise CO-OPERATIVE

BEAR 98 - which will allow NATO and Partner nations to develop further interoperability in the air delivery of humanitarian aid and aeromedical evacuation.

7. There is no single way to achieve our objectives, individually or in concert with Allies. It requires the patient implementation of a variety of activities. Our national programme of Outreach will include:

- increased English language training to help our Partners work with us and in NATO;
- more high level visits, between senior MOD civil servants and military officers so that key decision makers are better able to understand each other;
- expert advice to Partners to accelerate the development of democratically accountable, cost effective armed forces;
- more opportunities for British troops to train with their counterparts in Central and Eastern Europe to build trust by fostering personal contacts at all levels;
- enhanced assistance in the field of military education through additional places at military schools and colleges, the provision of advice on defence management, military training, and the attachment of in-country advisers.

8. Additional resources will be made available and targeted to ensure that they contribute in practical ways to ensuring security and stability in Europe.

Other Defence Diplomacy Activities

9. Beyond Central and Eastern Europe, we have traditionally provided military assistance to friendly Governments in support of our defence and foreign policy objectives. The Defence Diplomacy initiative has given a new emphasis to these activities and reinforced the need to target our efforts carefully where they are really needed, and in ways which reinforce our interests and responsibilities in the widest sense.

10. As with the Outreach programme, a range of activities supports this military task. They include:

- the provision of advice and training overseas through short term training teams, such as that provided to the Zimbabwe Defence Force on wilderness search and rescue and casualty evacuation techniques;

- the provision of loan service personnel, on longer periods of secondment, such as those currently assisting with the establishment of the Kuwaiti and Bangladeshi National Defence Colleges, and the team in South Africa which has assisted since 1994 with the integration of the then-existing armed forces (both statutory and non-statutory) into a new National Defence Force;
- training and education courses in Britain, where our aim is to build on our already excellent reputation;
- exercises with the armed forces of friendly countries, which help to develop regional stability and improve interoperability. Recent exercises with the Regional Security System in the Caribbean are a good example;
- establishment of a Defence Diplomacy Scholarship for overseas officers and officials;
- visits to friendly countries, which help maintain and develop friendly relations at all levels. These visits are usually scheduled additions to other operational activities.

Organising Defence Diplomacy

11. In-country representation is vital to the success of many aspects of defence diplomacy. This is provided by attaché, liaison and exchange posts. These individuals have the opportunity to develop strong bilateral relationships. Attachés in particular play a fundamental role in defence diplomacy and can ensure that the UK is aware of their host countries' interests and concerns.

12. Because of the nature and complexity of defence diplomacy, its aims will only be met by integrating the MOD's activities very closely with those of other Government Departments, particularly the Foreign and Commonwealth Office and the Department for International Development. We will, for example, be working with the Foreign and Commonwealth Office to ensure that we have the right number of attachés in the right places to meet our defence and security goals.

13. More generally, all those involved in defence will have a role to play as ambassadors for peace and security worldwide. This will require new skills and a shift in thinking. To help achieve this we will provide appropriate training to meet the requirements of defence diplomacy.

14. Finally, because this is in large part new territory, and we need to keep track of the impact

of what we and others are doing, we will develop, with outside assistance, transparent methods for monitoring and evaluating security reform in those countries in which we invest the most. This will help us to prioritise assistance and to assess the relative merits of our activities.

Conclusion

15. The new emphasis on defence diplomacy will provide important support for Britain's foreign and security policy objectives, using defence resources in constructive and imaginative ways. This will put Britain in a strong position to make a real contribution to conflict prevention. Defence diplomacy is therefore a significant challenge for all involved in defence in the modern world.



SUPPORTING ESSAY FIVE

DETERRENCE, ARMS CONTROL, AND PROLIFERATION

1. Deterrence, arms control and proliferation are critically important to Britain's security. All three issues have inspired sometimes heated public debate, and they have been the subject of many of the submissions made to the Strategic Defence Review and a major focus of the Review itself. Because of the priority the Government attaches to arms control and non-proliferation, they have been a key part of the Defence Diplomacy initiative described in the previous essay.

Deterrence

2. All of Britain's military capabilities have a role to play in preventing war. The possession of robust military forces, in conjunction with those of our Allies, presents potential adversaries with the prospect of losses outweighing any gains they might hope to make from aggression. Both nuclear and conventional forces therefore contribute to deterrence, providing a credible range of options for responding proportionately to an aggressor's behaviour.

3. But nuclear deterrence remains a controversial and complex issue because of the terrible consequences of any use of nuclear weapons. There are no easy answers here. The world would be a better place if such weapons were not still necessary, but the conditions for complete nuclear disarmament do not yet exist.

4. Progress has been made through the Strategic Arms Reduction Treaty process in reducing Russian and United States strategic range nuclear forces and deployed warheads. Nonetheless, very large numbers of strategic and shorter range nuclear weapons, and substantial conventional military capabilities, remain as a potent potential threat to the security of Britain and our Allies should current circumstances change for the worse. We and NATO have radically reduced our reliance on nuclear weapons, but in present conditions nuclear deterrence still has an important contribution to make in insuring against the re-emergence of major strategic military threats, in preventing nuclear coercion, and in preserving peace and stability in Europe.

5. The Government's General Election Manifesto therefore promised to retain Trident as the ultimate guarantee of the United Kingdom's security while pressing for multilateral negotiations towards mutual, balanced and verifiable reductions in nuclear weapons. When we are satisfied with progress towards our goal of the global elimination of nuclear weapons, we will ensure that British nuclear weapons are included in negotiations.

Britain's Nuclear Capability

6. Against this background, we have undertaken a fundamental re-examination of all aspects of Britain's nuclear posture. Three Trident submarines are already in service. The fourth and last, VENGEANCE, will be launched later this year and will enter service around the turn of the century. This fleet of four submarines will enable us to maintain continuous deterrent patrols over the lifetime of the Trident force.

Nuclear Force Reductions

7. Circumstances have, however, changed dramatically since Trident was ordered. The improvements in the strategic landscape have clearly reduced the nuclear deterrent capability we need to underpin our security.

8. Reductions have already been made in our nuclear forces. Since 1992, the United Kingdom has given up:

- the nuclear Lance missile and artillery roles we undertook previously with US nuclear weapons held under dual-key arrangements;
- our maritime tactical nuclear capability, so that Royal Navy surface ships no longer have any capability to carry or deploy nuclear weapons;
- all of our air-launched nuclear weapons.

Trident is now Britain's only nuclear system. We are the only nuclear power that has so far been prepared to take such an important step on the route to nuclear disarmament.

Warhead Numbers

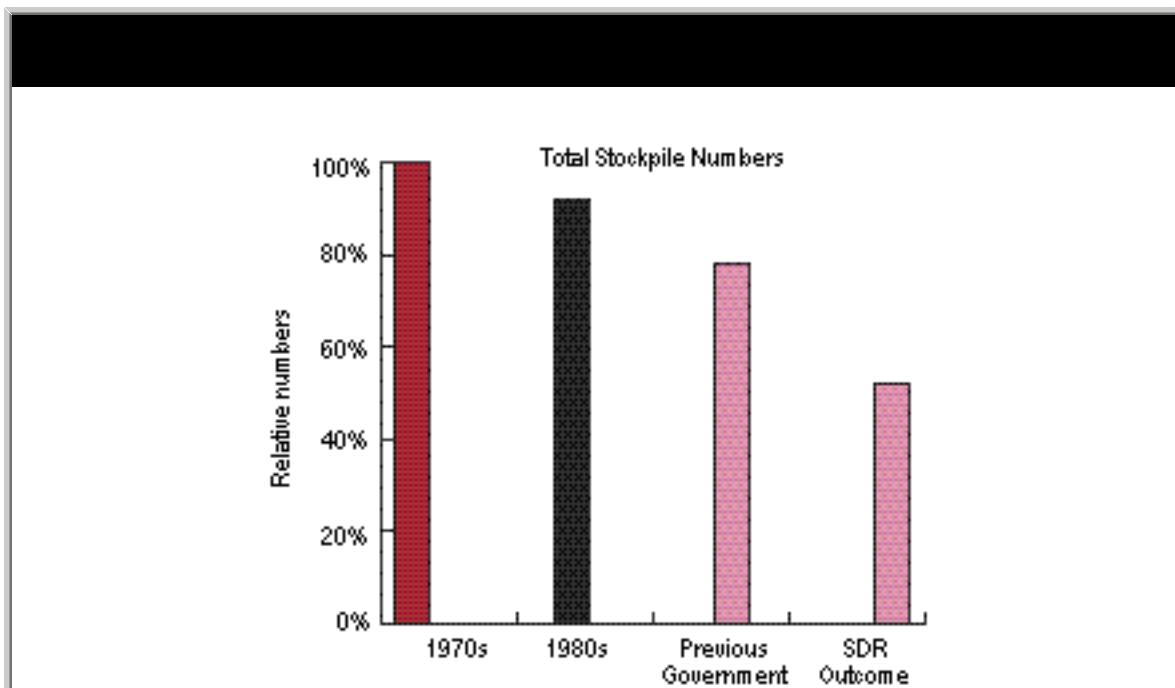
9. The reductions described above are very significant. But the Strategic Defence Review has concluded that in the improved strategic environment we can now go further. We have decided that:

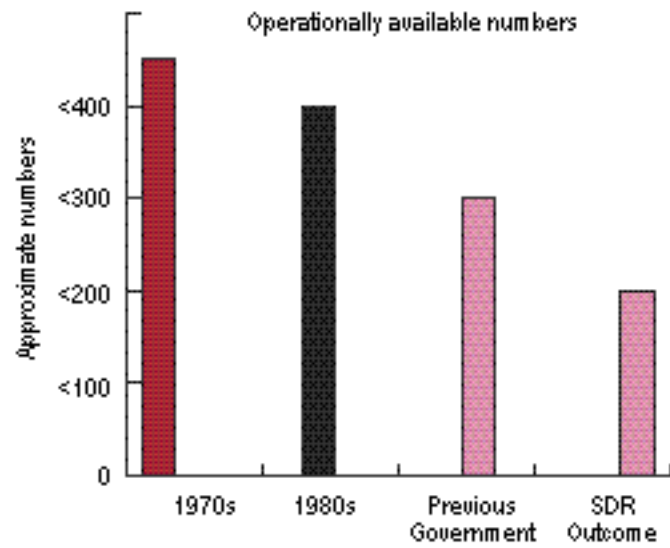
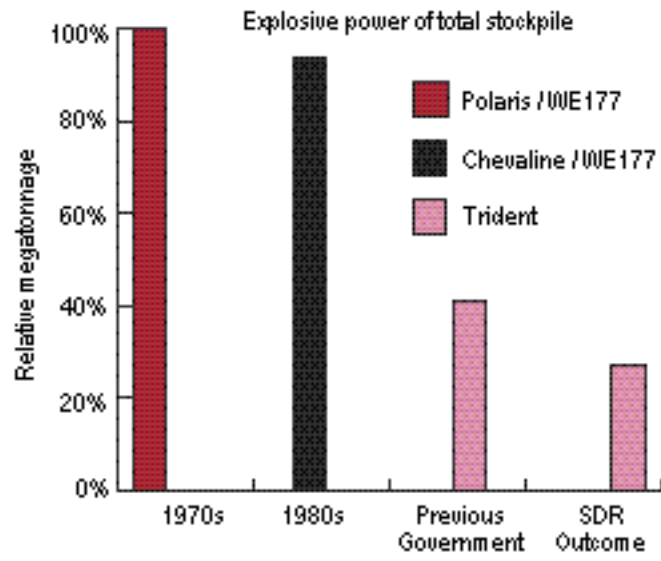
- we will maintain fewer than 200 operationally available nuclear warheads, a reduction of one third from the previous government's plans;
- Trident submarines on deterrent patrol will carry 48 warheads. This is the same number as carried on our Polaris submarines when they entered service. It compares with the previous government's ceiling of 96 warheads on each submarine.
- we have no operational need for any more than the 58 Trident missile bodies already delivered or on order.

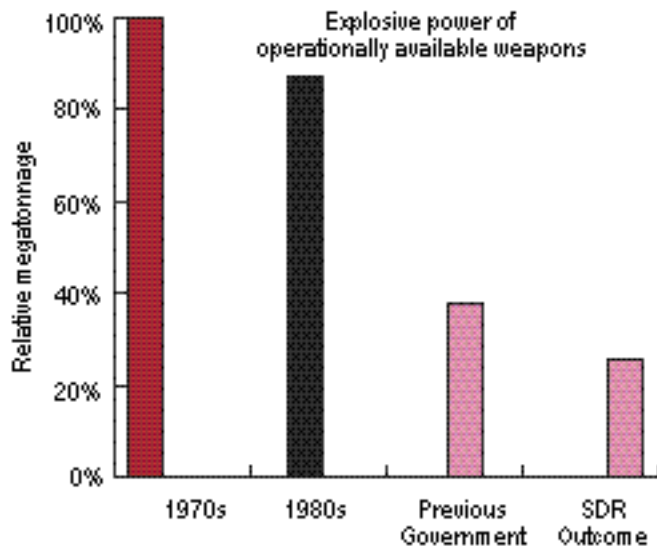
10. At the end of the Cold War, our nuclear forces comprised Chevaline warheads on Polaris missiles and several hundred WE177 free-fall bombs in the sub-strategic role. In future:

- we will have only half the number of operationally available nuclear weapons, with less than 30% of the explosive power;
- the 48 warheads deployed on each Trident submarine to meet both our strategic and sub-strategic requirements will have an explosive power one third less than the 32 Chevaline warheads which were eventually deployed on each Polaris submarine.

Details of the reductions in the size of our total stockpile and in the numbers of operationally available weapons are shown in *FIGURE 1*.







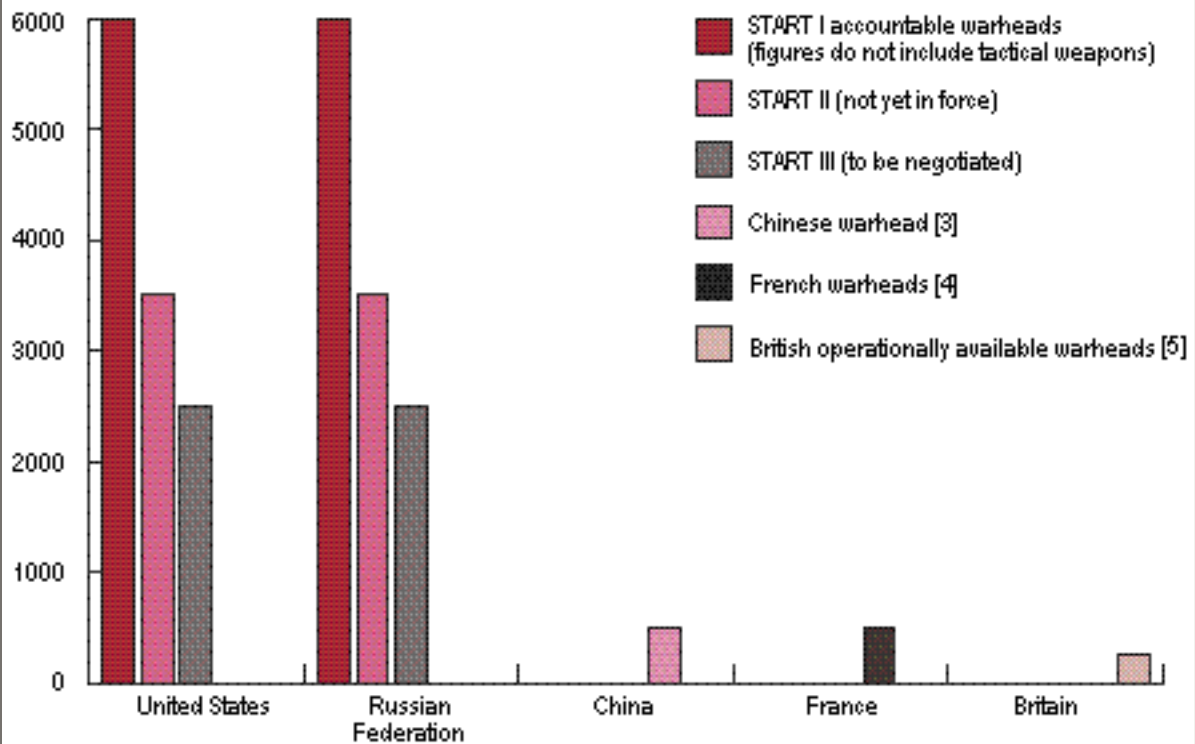
Notes:

1. The charts compare our nuclear weapon holdings during the 1970s and 1980s with the previous government's plans for British nuclear forces by the end of 1999 and SDR decisions. The charts do not include United States systems formerly operated by Britain under dual key arrangements.

2. The figures for total stockpile numbers include all British nuclear weapons, excluding only weapons, such as WE177 and Chevaline, which have been withdrawn from service and are awaiting final dismantlement.

3. The figures for operationally available numbers additionally exclude missile warheads held as a necessary processing margin or for technical surveillance purposes.

11. A comparison of the United Kingdom's holdings of operational warheads with those of the other four Nuclear Weapon States is shown in *FIGURE 2*.



Notes:

1. Table covers the nuclear warhead holdings of the five Nuclear Weapon States, including Britain, under the Nuclear Non-Proliferation Treaty (NPT). Only India, Pakistan, Israel, Cuba and Brazil have not signed the NPT. Brazil has stated its intention to do so.

2. Holdings for the United States and Russia represent the limit on accountable strategic warheads set under START I (to be achieved by 2001), the upper limit set in START II (to be achieved by 2007 once the Treaty has entered into force) and the upper limit discussed by the US and Russia for a START III treaty. The United States additionally holds some stocks of non-strategic nuclear weapons and Russia has a stockpile of several thousand tactical nuclear weapons.

3. Holdings for China represent what is known about the total size of China's nuclear forces, including both strategic and tactical weapons.

4. Holdings for France represent all French nuclear forces, comprising submarine-launched ballistic missile warheads and air-launched weapons.

5. Holdings for Britain represent SDR decisions on numbers of operationally

available Trident warheads to meet both the strategic and sub-strategic roles.

Nuclear Operational Posture.

12. The new strategic environment also enables us to maintain our nuclear forces at reduced readiness:

- only one Trident submarine is on deterrent patrol at any time;
- the submarines are routinely at a "notice to fire" measured in days rather than the few minutes' quick reaction alert sustained throughout the Cold War. Their missiles are de-targeted;
- submarines on patrol will carry out a variety of secondary tasks, without compromising their security, including hydrographic data collection, equipment trials and exercises with other vessels;
- over time we plan to reduce from double to single crews for each submarine, reflecting reduced operational tempo.

Other options considered in the Review

13. During the Review, consideration was given to more radical de-alerting measures, such as taking submarines off deterrent patrol, and removing warheads from their missiles and storing them separately ashore. Some of the outside inputs to the Review suggested Britain should move in these or similar directions. Our work concluded, however, that neither step would be compatible in current circumstances with maintaining a credible minimum deterrent with a submarine-based nuclear system. Ending continuous deterrent patrols would create new risks of crisis escalation if it proved necessary to sail a Trident submarine in a period of rising tension or crisis. The further step of removing warheads from missiles would also add a new vulnerability to our deterrent posture. This is a particular concern given our reduction to a single nuclear system. It could force a government into earlier and hastier decision making if strategic circumstances were to deteriorate. Either step would undermine the stabilising role that Britain's nuclear deterrent forces would otherwise play in a developing crisis.

Atomic Weapons Establishment

14. For as long as Britain has nuclear forces, we will ensure that we have a robust capability at the Atomic Weapons Establishment to underwrite the safety and reliability of our nuclear

warheads, without recourse to nuclear testing. There are no current plans for any replacement for Trident, and no decision on any possible successor system would be needed for several years. But we have concluded that it would be premature to abandon a minimum capability to design and produce a successor to Trident should this prove necessary. However, the Government's aim is to take forward the process of nuclear disarmament to ensure that our security can in future be secured without nuclear weapons.

Nuclear Transparency

15. Maintaining a degree of uncertainty about our precise capabilities is a necessary element of credible deterrence. Nonetheless, this Government is committed to being as open as possible about Britain's nuclear forces. The information we have now given about the number of warheads deployed on our Trident submarines and on aspects of previous systems such as our WE177 bombs, Polaris and Chevaline goes considerably further than previous governments. We will also be more open about stocks of fissile material; details are set out in [paragraph 26](#).

Trident Acquisition Costs

16. The principle of greater openness applies to the costs of nuclear forces. The current estimate of the total acquisition cost of the Trident programme is £12.52Bn. This figure (known as the non-hybrid estimate) covers all expenditure, including payments already made, at the price base and exchange rate assumed in the latest long term costing of the Defence programme. It represents a reduction in real terms of £177M from last year.

17. The programme shows an overall reduction in costs, including the savings resulting from the decision to process missiles at the United States facility at Kings Bay, of some £3.7Bn compared with the original estimate. The vast majority of the costs of procuring Trident have now been spent. Expenditure on the Trident acquisition programme to the end of February 1998 represented some 91% of the estimate expressed in actual outturn prices. This is shown in *FIGURE 3*.

	US £M	UK £M	Total £M
Previous estimate (March 1997) at 1996/97 economic conditions (£1=\$1.5205)	3,645	8,925	12570
Real changes	-67	-110	-177
Price inflation	+76 (2.1%)	+262 (3%)	+338
Exchange rate variation between March 1997 and March 1998	-211	n/a	-211
Revised estimate at 1997/98 economic conditions (£1=\$1.6137)	3,443	9,077	12,520
<i>Note:</i>			
<i>Estimate does not include procurement costs of £167M for Spearfish torpedoes carried by Trident submarines.</i>			

Trident Operating Costs

18. Within the Review, the operating costs of the Trident force have been re-examined to ensure that all the costs relevant to the support of Trident have been identified and to take into account recent operating experience. This has shown that the average annual operating cost of the Trident force over a planned thirty-year life is expected to be around £280M. Earlier estimates derived from a less rigorous exercise conducted in advance of actual operating experience. This figure does not represent the amount that would be saved by giving up our deterrent given the substantial transitional costs that would be involved. A breakdown of the operating costs is shown in *FIGURE 4*.

	Annual operating costs, £million, averaged over 30-year life of Trident
Manpower ^[2]	33
In-service support of submarine	33
In-service support	13
In-service support	47
Base / site running costs	61
Refit-maintenance	53
Stores and spares	35
In-service trials	1
Dedicated communications	1
Total	277
<i>Notes:</i>	
<p>1. This estimate has been derived from a compilation of 30-year estimates covering the activities listed above which are directly attributable to the operation of the Trident force. They are based on current assumptions about operating patterns. These estimates are shown as an annual average for <u>presentational purposes only</u>. They do not represent actual expenditure in a given year nor the amount which might be saved if the activity were terminated.</p>	
<p>2. Includes: operational crews, specialist crew training, dedicated shore staff, and technical staff.</p>	
<p>3. Includes: the command system, sonar and Spearfish.</p>	

Nuclear Warhead Programme Costs

19. The nuclear warhead programme costs directly related to Trident in financial year 1997/98 are estimated at £114M. Expenditure on our nuclear warhead programme as a whole amounted to £410M. This included the cost of decommissioning weapons withdrawn from service; substantial continuing costs arising from earlier stages of our nuclear warhead programme; infrastructure costs at the Atomic Weapons Establishment (including expenditure to achieve safety and environmental improvements); and other activities, including support to

other Government Departments and Comprehensive Test Ban Treaty verification. The overall cost of the warhead programme is declining. A breakdown of the costs is shown in *FIGURE 5*.

	£m
Direct Trident-related warhead expenditure	
(a) Trident Production costs at Atomic Weapons Establishment (AWE)	20
(b) Trident In-Service Support at AWE	9
(c) Research, Development and Capability Maintenance at AWE	58
(d) Trident related waste management at AWE	4
(e) Other warhead programme expenditure outside AWE	23
Sub-Total	114
AWE infrastructure	
(f) Maintenance, safety and environmental improvements to meet Nuclear Installations Inspectorate requirements	168
Other activities	
(g) Other activities including support to other Government Departments and Comprehensive Test Ban Treaty monitoring	19
Costs arising from earlier programmes	
(h) Breakdown and dismantlement of WE177 and Chevaline warheads	11
(i) Payments to British Nuclear Fuels Limited and United Kingdom Atomic Energy Authority etc. in respect of liabilities from earlier stages of the UK nuclear programme	103
(j) Management and disposal of waste at AWE from earlier stages of UK nuclear programme, and decommissioning of redundant facilities	13
Sub-total	127
Total	428
Less 1996/97 VAT receipt £18m	18
GRAND TOTAL	410

Note:

Total AWE running costs comprise all above elements excluding (e) and (i) to give a total of **£302M**.

Arms Control

20. Consideration of how best to carry forward the Government's commitment to the elimination of nuclear weapons has been a key aspect of the Review. But this goal cannot be achieved in isolation from wider political and security realities, including the recent nuclear tests in India and Pakistan. The challenge is to create the conditions in which no state judges that it needs nuclear weapons to guarantee its security. The radical improvements in European security in recent years have shown that this is not an impossible objective. But it is not a task for the Nuclear Weapon States alone. All states have their part to play.

21. The Government welcomes the continuing bilateral START process between the US and Russia, and looks forward to prompt Russian ratification of START II, to enable early negotiations on further bilateral reductions in their strategic holdings, under START III, as agreed by Presidents Clinton and Yeltsin at Helsinki in March 1997. In parallel, with our NATO Allies, we are consulting with Russia in the NATO-Russia Permanent Joint Council on issues relating to Russia's continuing substantial holdings of non-strategic nuclear weapons.

The Nuclear Non-Proliferation Treaty

22. The Government is unequivocally committed to Britain's obligations under the Nuclear Non-Proliferation Treaty. The effective implementation of all its provisions is vital for global peace and security, and we attach great importance to the strengthened review process agreed in 1995. We also welcome the various measures taken by the International Atomic Energy Agency in recent years to strengthen its safeguards systems.

23. We have to stop nuclear proliferation to reach our goal of a world free of nuclear weapons. There is a clear international consensus that the way to achieve this is through the Nuclear Non-Proliferation Treaty (NPT) and the Comprehensive Nuclear Test Ban Treaty (CTBT). By testing, India and Pakistan have challenged this consensus. They risk igniting a dangerous arms race and endangering stability in and beyond their region. This is the wrong way to go. We and many other states, including through a resolution by the UN Security Council, have called upon both countries to join the global regime against nuclear proliferation by signing the CTBT and joining in negotiations on a Fissile Material Cut-Off Treaty without conditions. We

are seeking commitments that they will not weaponise or deploy nuclear weapons or missiles. Our goal continues to be the adherence by all states, including India and Pakistan, to the NPT as it stands. This treaty is the cornerstone of the international non-proliferation regime and the essential foundation for the pursuit of nuclear disarmament.

The Comprehensive Test Ban Treaty

24. Britain ratified the Comprehensive Nuclear Test Ban Treaty on 6 April this year, alongside France. We were the first two Nuclear Weapon States to do so, and hope the others will soon follow; this is a prerequisite for the Treaty to enter into force. By ending nuclear testing the Treaty constrains the development of new types of nuclear weapons. It therefore represents an important step towards global disarmament. Britain played an important role in the Treaty negotiations, particularly in the design of the International Monitoring System to verify compliance. The Government is working for its effective establishment at the earliest practicable date. Britain is one of the few countries so far to have paid its contributions to it in full. We will also maintain our national monitoring and analysis capability.

A Fissile Material Cut-Off Treaty

25. To complement the Comprehensive Test Ban Treaty, a key priority is a verifiable, legally binding convention banning the future production of fissile material for nuclear weapons or other nuclear explosive devices (a Fissile Material Cut-Off Treaty). This is an essential step towards global elimination of nuclear weapons, and the Government is prepared to enter into immediate negotiations for such a treaty in the Conference on Disarmament.

Fissile Material Management

26. Britain is legally entitled to hold stocks of nuclear materials needed for national security outside international safeguards. As part of our commitment to the control of fissile material, the Government is now ready to be the first Nuclear Weapon State to declare the total size of these stocks. They comprise:

- 7.6 tonnes of plutonium;
- 21.9 tonnes of highly enriched uranium; and
- 15,000 tonnes of other forms of uranium.

Much of this stock is no longer required for defence purposes, and 4.4 tonnes of plutonium, including 0.3 tonnes of weapons-grade plutonium, and over 9,000 tonnes of non-highly enriched uranium will now be placed under European Atomic Energy Community (EURATOM) safeguards, and made liable to inspection by the International Atomic Energy Agency (IAEA).

All stocks of highly enriched uranium will, however, be retained outside safeguards, since material no longer needed for nuclear weapons will be used for the naval propulsion programme. We have considered whether further disaggregation of these totals at this time would be compatible with our continuing, if reduced, security requirement. We have concluded that it would not.

27. All re-processing of spent fuel from defence reactors at Chapelcross will in future be conducted under EURATOM safeguards and made liable to inspection by the IAEA. This will mean that all planned future reprocessing and enrichment in the UK will take place under international safeguards. We will, however, retain the right to resume such activities outside safeguards until agreement is reached on a Fissile Material Cut-Off Treaty. Britain also has the right to withdraw material from safeguards for reasons of national security (including such purposes as radiography at defence nuclear facilities), but withdrawals will be limited to small quantities of materials not suitable for explosive purposes, and the details will be made public. Defence nuclear facilities will continue to remain outside international supervision.

28. Eliminating nuclear weapons will require states which have had nuclear programmes outside international safeguards to account for fissile material produced. We will therefore begin a process of declassification and historical accounting with the aim of producing by Spring 2000 an initial report of defence fissile material production since the start of Britain's defence nuclear programme in the 1940s.

Nuclear Verification

29. Verification of arms control and non-proliferation agreements is critical to their effectiveness, and has therefore been examined in the Review. It has traditionally been an issue on which Britain has made a substantial contribution. Over time we have developed particular expertise in the nuclear field in the monitoring of fissile materials, particularly through our involvement in the development of the IAEA's safeguards system, and in monitoring of nuclear tests. The Government intends to maintain these strengths, which will be important in implementing the Comprehensive Nuclear Test Ban Treaty and in negotiating a Fissile Material Cut-Off Treaty.

30. But Britain has only a very limited capability at present to verify the reduction and elimination of nuclear weapons. A programme is therefore being set in hand to develop expertise in this area, drawing in particular on the skills of specialists at the Atomic Weapons Establishment. A small team will be established to consider technologies, skills and techniques, and to identify what is already available to us in the United Kingdom. The Government will consider how to take this programme forward in the light of the team's interim conclusions. The aim is to ensure that, when the time comes for the inclusion of British nuclear weapons in multilateral negotiations, we will have a significant national capability to contribute to the verification process.

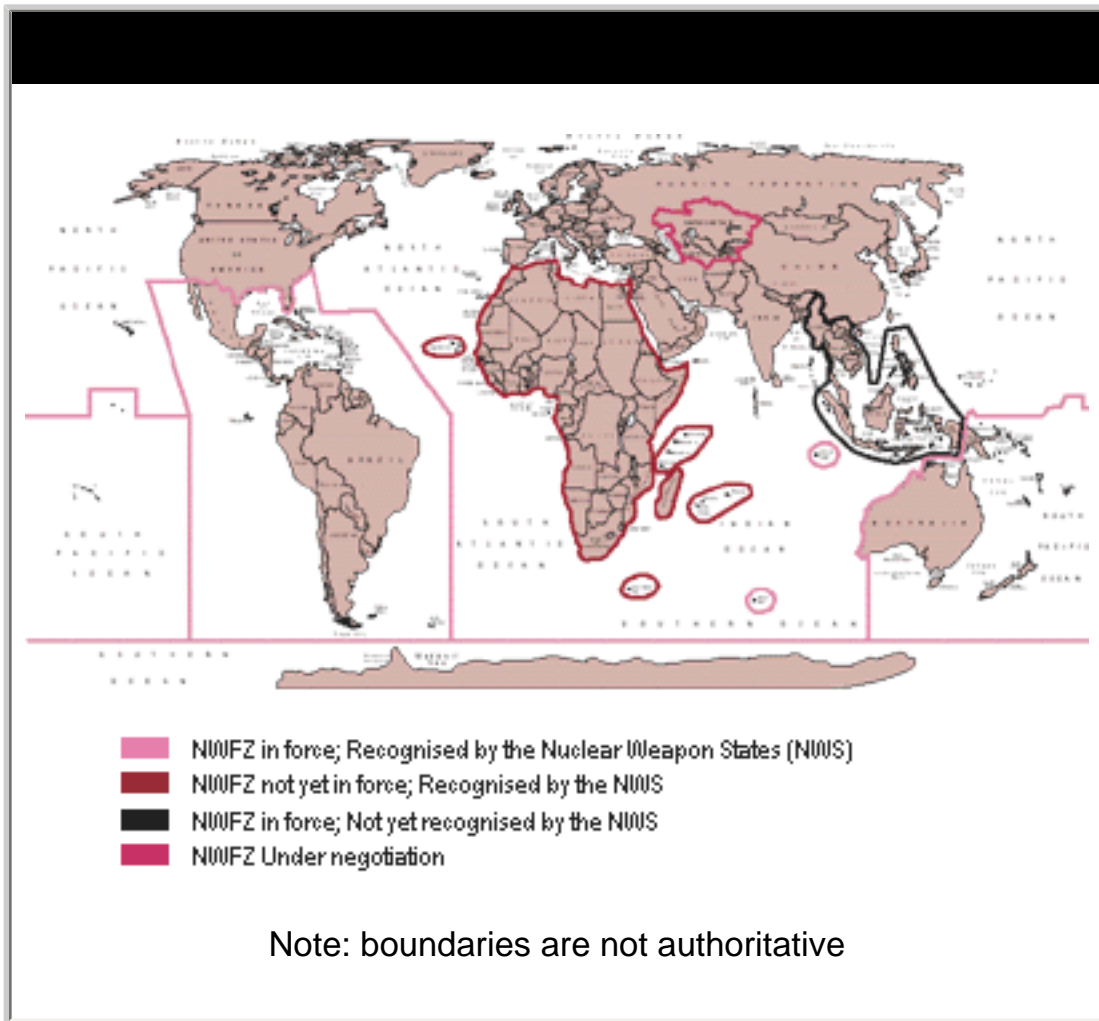
Negative Security Assurances

31. Britain has repeatedly made it clear that we will not use nuclear weapons against a non-nuclear weapon state not in material breach of its nuclear non-proliferation obligations, unless it attacks us, our Allies or a state to which we have a security commitment, in association or alliance with a nuclear weapon state. Britain has also undertaken to seek immediate UN Security Council action to assist any non-nuclear-weapon state party to the Non-Proliferation Treaty that is attacked or threatened with nuclear weapons. In addition, we would be prepared to take appropriate measures in response to a request from the victim for technical, medical, scientific or humanitarian assistance.

32. We:

- welcome and support the recent re-establishment of an Ad Hoc Committee on Security Assurances at the Conference on Disarmament in Geneva;
- believe that the further extension of regional nuclear-weapon-free zones has an important role to play where the conditions are right;
- ratified the relevant protocols to the Treaty of Raratonga (South Pacific Nuclear Free Zone) in September 1997;
- intend to ratify the protocols to the Treaty of Pelindaba (African Nuclear-Weapon-Free Zone) soon;
- hope to be able to sign the protocol to the Treaty of Bangkok (South East Asian Nuclear-Weapon-Free Zone);
- support the initiative by the States of Central Asia to establish a nuclear-weapon-free zone in their region.

FIGURE 6 shows Nuclear-Weapon-Free Zones.



33. In the modern world, nuclear weapons are not the only weapon of mass destruction. The Review therefore addressed the continuing risks arising from the proliferation of chemical and biological weapons. The Government is committed to their elimination. But the difficulty and complexity of this task should not be underestimated.

34. The Government's policy has two main strands:

- existing international arms control and non-proliferation regimes must be strengthened, increasing the political and economic costs to proliferators, and the risk of their being detected by the international community;
- as long as risks remain, British forces must be trained and equipped to operate in a chemical or biological environment. This fulfils our duty of care to our people and, by ensuring that there is no military benefit from using chemical or biological weapons, it reduces the incentives for a proliferator to acquire them.

In the long term, we seek to create the conditions where no state can credibly judge that the gains from acquiring such weapons would be equal to the costs and risks involved.

Chemical Weapons

35. The Chemical Weapons Convention was opened for signature in 1993 and entered into force last year. It bans the development, production, stockpiling and use of chemical weapons, and requires the destruction of existing stockpiles. The Government is working closely with the international inspectorate - the Organisation for the Prohibition of Chemical Weapons (OPCW) - to ensure that the Treaty is implemented in full as soon as possible. The Chemical and Biological Defence sector at Porton Down has a programme to develop chemical and biological arms control technologies. We are also considering whether we can assist Russia in dismantling the vast stocks of chemical weapons it inherited from the Soviet Union.

36. Implementation of the Chemical Weapons Convention in the United Kingdom is the responsibility of the Department of Trade and Industry. Britain was one of the first states to agree to have its relevant defence and industrial facilities inspected under the Convention, and all these inspections to date have been completed successfully. We are working with the OPCW in developing its inspection capabilities; in February this year, at our invitation, the OPCW conducted its first joint practice challenge inspection at RAF Valley in Anglesey.

Biological Weapons

37. The Government also wants to strengthen the Biological and Toxin Weapons Convention (BTWC), which entered into force in 1975. It is now known that at least two states, the Soviet Union and Iraq, conducted illegal offensive programmes for many years after signing it. Since 1996 negotiations have been underway in Geneva on measures to strengthen the Convention.

38. Britain is playing a major role in the BTWC negotiations and, during our Presidency, the European Union agreed a common position. This contains an undertaking to seek to conclude substantive negotiations this year, to allow an agreed Protocol to be adopted by the States Parties to the BTWC at a Special Conference early in 1999. It spells out four key elements which we believe must be in the Protocol:

- declarations of a range of facilities and activities of potential relevance under the Convention, so as to enhance transparency;
- provision for visits to facilities in order to promote accurate and complete declarations, and thus further enhance transparency and confidence;
- provision for rapid and effective investigations into concerns over non-compliance, including facility and field investigations;
- a cost-effective and independent organisation, including a small permanent staff, capable of implementing the Protocol effectively.

39. Britain has firmly supported the efforts of the United Nations Special Commission on Iraq (UNSCOM) to identify and destroy Iraq's arsenal of chemical and biological weapons, along with its nuclear weapons programmes and its ballistic missile delivery systems, in accordance with Iraq's own undertakings to this effect. But Iraq's latest attempts to evade its commitments under numerous UN Security Council resolutions, and the Soviet Union's previous clandestine offensive biological weapons programme, have demonstrated how difficult it is to prevent a nation determined to ignore international norms and controls from acquiring chemical or biological weapons.

The risks from proliferation

40. Our assessment is that there could be around 20 countries that either possess or have shown an interest in developing offensive chemical and/or biological warfare capabilities. The Government is also concerned about the nuclear programmes of some non-nuclear weapons states, as well as India and Pakistan. Proliferation is not simply a matter of weapons but of delivery systems as well. These include ballistic missiles, which may be used to deliver nuclear, biological or chemical weapons. At present, any risk to Britain from the ballistic missiles of nations of concern in terms of proliferation is many years off, but the risk to some of our NATO allies is less distant; and British forces must be able to operate in regions, such as the Gulf, where they might face these risks.

Non-Proliferation and Export Controls

Member country	<i>Australia Group (chemical and biological weapons)</i>	<i>Nuclear Suppliers Group (nuclear)</i>	<i>Zangger Committee (nuclear)</i>	<i>Missile Technology Control Regime</i>	<i>Wassenaar Agreement (conventional / dual use goods)</i>
Argentina	♣	♥	♠	♦	⊕
Australia	♣	♥	♠	♦	⊕
Austria	♣	♥	♠	♦	⊕
Belgium	♣	♥	♠	♦	⊕
Brazil		♥		♦	
Bulgaria		♥	♠		⊕
Canada	♣	♥	♠	♦	⊕
China			♠		

Czech Republic	♣	♥	♠		⊕
Denmark	♣	♥	♠	♦	⊕
Finland	♣	♥	♠	♦	⊕
France	♣	♥	♠	♦	⊕
Germany	♣	♥	♠	♦	⊕
Greece	♣	♥	♠	♦	⊕
Hungary	♣	♥	♠	♦	⊕
Iceland	♣			♦	
Ireland	♣	♥	♠	♦	⊕
Italy	♣	♥	♠	♦	⊕
Japan	♣	♥	♠	♦	⊕
Latvia		♥			
Luxembourg	♣	♥	♠	♦	⊕
Netherlands	♣	♥	♠	♦	⊕
New Zealand	♣	♥		♦	⊕
Norway	♣	♥	♠	♦	⊕
Poland	♣	♥	♠		⊕
Portugal	♣	♥	♠	♦	⊕
Romania	♣	♥	♠		⊕
Russia		♥	♠	♦	⊕
Slovakia	♣	♥	♠	♦	⊕
South Africa		♥	♠	♦	
South Korea	♣	♥	♠		⊕
Spain	♣	♥	♠	♦	⊕
Sweden	♣	♥	♠	♦	⊕
Switzerland	♣	♥	♠	♦	⊕
Turkey				♦	⊕
Ukraine		♥	♠		⊕
United Kingdom	♣	♥	♠	♦	⊕
United States	♣	♥	♠	♦	⊕

Note: As at 30 June 1998

41. The Government strongly supports diplomatic measures to prevent the proliferation and development of chemical and biological weapons, and their means of delivery, and will continue to work actively to this end. Britain is a founding member of all the export control regimes (the Nuclear Suppliers Group, Zangger Committee, Australia Group, the Missile Technology Control Regime and the Wassenaar Arrangement) and we are committed to improving their effectiveness.

Defence Responses to Proliferation

42. In addition to these measures, we need military capabilities to address the risks to British forces deployed overseas posed by nuclear, biological and chemical weapons and their means of delivery. To do otherwise would be an unacceptable constraint on our political freedom of action and could put our people at undue risk. Britain has played a pivotal role in NATO work in defining the capabilities needed to respond to these risks. The Strategic Defence Review addressed responses which might now be required at the national level.

43. A crucial element is to ensure the fullest possible information on the intentions and capabilities of countries of concern. It is often difficult to establish the facts but we will continue to devote significant resources to this effort.

44. There is no "silver bullet" which will provide a complete answer to the risks posed by chemical and biological weapons. What is needed is a balance of capabilities, to deter, counter, and defend against the use of such weapons. Protective measures will play an important part, including detection capabilities and the possibility of immunising personnel; so too will other conventional capabilities which can play a role in defeating key targets relating to the programmes of countries of concern.

Ballistic Missile Defence

45. A number of systems intended to destroy ballistic missiles are under development, notably in the United States. These may play a role within a balanced spectrum of capabilities to counter the risks posed by chemical and biological weapons and their means of delivery. But technologies in this area are changing rapidly and it would, at this stage, be premature to decide on acquiring such a capability. We will, however, monitor developments in the risks posed by ballistic missiles and in the technology available to counter them, participate in NATO studies, and work closely with our Allies to inform future decisions.

Review of Defence Responses to Proliferation

46. The Strategic Defence Review has heightened awareness of the challenge British forces would face if they had to operate in a potentially hostile nuclear, biological or chemical environment and has identified various inherited shortfalls in Britain's defensive capabilities

against these weapons. To address these shortfalls, we will:

- increase planned procurement of land-based biological detection equipments;
- establish a joint Army and Royal Air Force nuclear, biological and chemical defence capability, manned mostly by Regular personnel, available at high readiness to help protect deployed forces;
- continue to develop vaccines against known biological agents.

47. These measures will help meet immediate problems. In the longer term, we intend to go further to ensure a coherent national response to these threats. A further detailed review, building on work undertaken in NATO, has been set in hand. Work should be completed by the Summer Recess. A summary of the resulting conclusions will then be made public.

Conventional Arms Control

48. Conventional arms control has contributed very significantly to the overall lowering of tension in Europe. The Government is firmly committed, with our Allies and Partners, to proceed with this process. The main conventional arms control agreements involving the United Kingdom are the Conventional Armed Forces in Europe Treaty (CFE and CFE1A), the Vienna Document 94 and the Open Skies Treaty.

CFE Adaptation

49. The central challenge at present is to ensure the continuing relevance of the 1990 CFE Treaty. This limits the numbers of heavy weapons in the 30 countries of NATO and the former Warsaw Pact. Over 50,000 heavy weapons have now been destroyed or otherwise reduced since the Treaty was signed. But the Treaty was negotiated at the end of the Cold War, and now needs adapting to reflect changes in the European security environment. Negotiations between the 30 States Parties started in Vienna in January 1997, and are likely to last well into 1999. The Government is fully committed to their successful conclusion. As CFE is at the heart of co-operative European security, its adaptation is a fundamental part of NATO's developing relationship with Russia and other partners, and of the process of building security conditions in Europe which in time may allow us to dispense with nuclear weapons.

The Vienna Document and Open Skies

50. In the same vein and a similar timescale, work is under way to revise the Vienna Document 94. This is a politically binding agreement by the 54 participating States of the Organisation for Security and Co-operation in Europe (OSCE), which promotes transparency, stability and

openness in military affairs. Britain also continues to use contacts with Russia, Ukraine and Belarus to encourage their ratification of the 1992 Open Skies Treaty. When it enters into force, this will enhance other arms control agreements by providing for the over-flight and photography of participating States Parties' territory. To demonstrate that we are committed to putting principles into action, the Government will restore Britain's active contribution to Open Skies implementation by committing a specialised Andover aircraft to conduct photographic overflights, and encourage other states to undertake similar flights over Britain.

The Dayton Agreement

51. Britain also actively supports the Dayton Arms Control process as a member of the Contact Group. We welcomed the OSCE decision last December to initiate consultations and negotiations on a new agreement to further enhance stability and security in the Balkans and the surrounding region. This will build on the successes of the current agreements under Dayton Articles II (confidence and security building measures) and IV (CFE-style reductions and limitations).

Humanitarian Obligations

52. All States have an obligation to minimise and alleviate the consequences of conflict for innocent civilians. This is fundamental to an ethical security and defence policy, and we have clearly shown our commitment in this area, in particular by our efforts to ban anti-personnel landmines, and to ratify the Additional Protocols to the Geneva Convention.

Anti-personnel landmines

53. The Government has devoted much energy to the issue of anti-personnel landmines (APLs) since coming to office, and we were delighted to be among the first signatories of the Ottawa Convention on 3 December 1997. Our intention is to ratify the Convention as quickly as possible. In the meantime, work is well under way to fulfil our obligations under the Convention by, for example, a programme to destroy stockpiled operational APLs by 1 January 2000, well in advance of the agreed deadline. We have also considerably enhanced our activities in the area of humanitarian demining, for example by establishing a Mine Information and Training Centre at Minley, and by the gift of ten demining tractors to the HALO Trust.

Additional Protocols

54. The United Kingdom signed but did not ratify the Additional Protocols to the 1949 Geneva Conventions in 1977. They further codify and develop the laws of armed conflict set out in the Geneva Conventions and Britain played a leading role in their negotiation. Additional Protocol I contains rules protecting the victims of international armed conflict, particularly women and children. Additional Protocol II governs internal armed conflict and provides fundamental

guarantees of humane treatment for persons who do not take part or have ceased to take a direct part in hostilities. We regarded our ratification after 20 years as a matter of priority. The United Kingdom accordingly ratified on 28 January 1998.

Conclusion

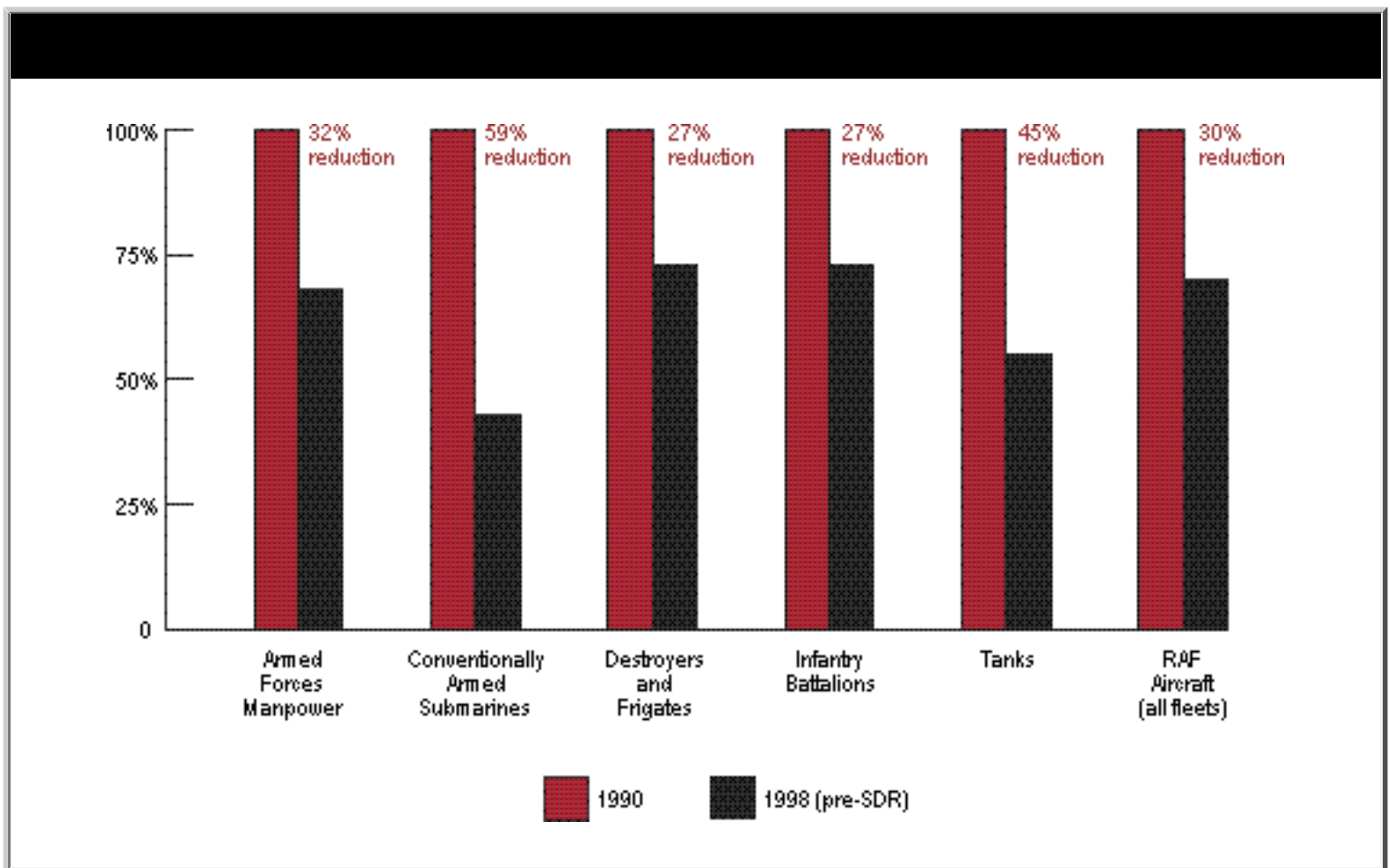
55. The Government is committed to the goal of the global elimination of nuclear, biological and chemical weapons. We will work to create conditions in which even a minimum level of nuclear deterrence is no longer necessary. Until then, Britain will maintain the minimum level of nuclear deterrent necessary to prevent the possibility of major war in Europe. At the same time, we will work to remove the risk of proliferation of nuclear, biological and chemical weapons worldwide, while maintaining a robust defensive capability to protect British interests in the event of their use. The Government is convinced that the interconnecting policies and programmes set out above, which have either emerged from or been confirmed by the analysis and conclusions of the Strategic Defence Review, represent a coherent, ethical and militarily sound contribution to British security.



SUPPORTING ESSAY SIX

FUTURE MILITARY CAPABILITIES

1. The aim of the Strategic Defence Review has been to reshape and modernise Britain's Armed Forces for the 21st century. All three Services have undergone great changes in the last decade (see *FIGURE 1*). At the same time, military personnel and the civilians who support them have had to cope with high levels of operational activity which few would have predicted at the end of the Cold War.



2. Nobody with an understanding of defence issues would argue that the Armed Forces should

be immune to change. But changes to military capabilities must be matched to changes in the strategic environment, and to the activities we expect our forces to undertake. A process of evolution has been taking place throughout the last decade, and in some respects our forces are well prepared for the challenges of the next century. But the process is not yet complete. This essay explains how we have sought to ensure that Britain's Forces are the right size and shape, with the people they need for the tasks we want them to undertake.

I. Process

3. To translate the Review's policy framework into a detailed basis for determining Britain's defence needs, a comprehensive set of planning assumptions was developed. This methodology has been used before but it was refined and expanded considerably during the Review.

4. The first step was to define the Missions which the Armed Forces must be able to undertake in support of foreign and security policy, and develop them into specific Military Tasks. The Missions are set out below, and both they and the Military Tasks are described in detail in [Annex A](#).

THE MISSIONS OF THE ARMED FORCES

A: PEACETIME SECURITY

B: SECURITY OF THE OVERSEAS TERRITORIES

C: DEFENCE DIPLOMACY

D: SUPPORT TO WIDER BRITISH INTERESTS

E: PEACE SUPPORT AND HUMANITARIAN OPERATIONS

F: REGIONAL CONFLICT OUTSIDE THE NATO AREA

G: REGIONAL CONFLICT INSIDE THE NATO AREA

H: STRATEGIC ATTACK ON NATO

The most important changes from previous analyses are the establishment of Defence

Diplomacy as a distinct Mission and the decision that we should no longer maintain forces solely to meet a strategic attack on NATO - an attack on the scale of the Cold War is no longer within the capacity of any conceivable opponent and to recreate such a capacity would take many years.

5. The next step was to consider the level of forces or scales of effort over and above those required for day-to-day commitments (such as Northern Ireland) that we should plan to be able to contribute to different Missions, taking account of Britain's national interests, operational requirements, Allies' capabilities and our military strengths. These assumptions were also influenced by recent experience of operations, such as the Gulf Conflict, Bosnia and many smaller deployments, and an assessment of future trends and requirements. It should be emphasised that the scales of effort are planning tools; they do not prejudge the size of an actual commitment in particular contingencies, which could be larger or smaller depending on the circumstance. The principal scales are:

- small scale: a deployment of battalion size or equivalent. Examples include the ARMILLA patrol in the Gulf, the British contribution to United Nations Forces in Cyprus (UNFICYP), and the Royal Air Force operations enforcing the no-fly zones over northern and southern Iraq;
- medium scale: deployments of brigade size or equivalent for warfighting or other operations. An example would be our contribution to the NATO-led Intervention Force (IFOR) in Bosnia;
- large scale: deployments of division size or equivalent. The nearest recent example would be our contribution to the Gulf War coalition, although on that occasion the British division deployed with only two of its three brigades. Large scale is the maximum size of force we would plan to be able to contribute to peace enforcement operations, or to regional conflicts outside the NATO area;
- very large scale and full scale: these comprise all the forces we plan to make available to NATO to meet significant aggression against an Ally. This is the most serious single scenario that we might now face. The two scales differ primarily in the warning time available in response to the emergence of a major threat, and in the size of that threat. In both cases, we assess that the warning time we would have available would be many months or even years.

6. We then considered the levels of readiness applicable to different sorts of operation: that is, the notice period within which units must be ready to deploy from their bases or other designated areas. The readiness required of a unit helps to determine its level of manning, equipment, training and logistic sustainability, and also whether it must be Regular or could be Reserve. The aim was to match readiness to political and military requirements, including

warning times where applicable. Account has also been taken of campaign sequencing, or the phases in which operations are likely to unfold, recognising that the readiness of forces should be graduated in accordance with the likely timescales for their employment.

7. Another important factor is the likely duration of operations and the potential need to sustain a deployment for an indefinite period - endurance. The possibility that some operations will be enduring (as in Cyprus, where we have taken part in UNFICYP since 1964, and more recently in Bosnia) has a significant impact on total force structure, as there must be sufficient units to be able to provide for the rotation of those actually deployed at any one time.

8. We also considered the number of operations, of a given scale of effort and duration, that we should be able to conduct at any time - concurrency. This is crucial to determining the size and shape of force structure needed in the modern world, where military planning is no longer dominated by a single worst-case scenario. Our conclusion was that not to be able to conduct two medium scale operations at the same time would be an unacceptable constraint on our ability to discharge Britain's commitments and responsibilities. It would, for example, oblige us to withdraw from an enduring commitment such as Bosnia in order to respond to a second crisis.

9. Finally, emerging trends in the relative importance of different aspects of defence capability were identified, to guide force development and ensure that our forces have the capabilities they will need, rather than those we needed in the past.

10. Taking all these planning assumptions together, we concluded that the size and shape of our forces are dictated by two main requirements:

- the challenge of conducting two concurrent medium scale operations - one a relatively short warfighting deployment, the other an enduring non-warfighting operation. For many elements of our force structure this is the most demanding scenario;

- a full scale operation, which is the most demanding scenario for the remainder of the force structure.

11. On the basis of the planning assumptions, we carried out an exhaustive analysis of the force elements required for each Military Task, and thus of the numbers of each force element required overall. The methodology used, the attribution of force elements to Military Tasks and the consequent numbers of each force element are set out in more detail at [Annex A](#). The remainder of this essay sets out the main results of this process in terms of future force structure.

II. Future Force Structures and Capabilities

12. The nature of future operations - force projection. For four decades following the Second World War, British military planning was dominated by the Cold War, in which it was expected that most ground and air forces would fight from or close to their peacetime bases, with the benefit of well-established infrastructure. This scenario envisaged a highly intense conflict of relatively short duration. By contrast, modern operations are likely, even in the worst case, to be smaller in scale; indeed, as explained above, the risk of a strategic attack on NATO is now so remote that we no longer need to maintain forces specifically for that contingency. But modern operations will often be more demanding in other ways. British Forces can expect to have to go to the operation, rather than have it come to them. They may have to operate in areas where the supporting infrastructure is limited or non-existent. And they may have to sustain non-warfighting operations for indefinite periods whilst retaining the ability to respond to other contingencies. This calls for rather different force projection capabilities than we have needed in the past.

13. Multinationality. With the exception of national commitments such as Northern Ireland and the security of our Overseas Territories, future operations will almost always be multinational. Britain will usually be working as part of a NATO, UN or Western European Union (WEU) force, or an ad hoc "coalition of the willing". This means that we do not need to hold sufficient national capabilities for every eventuality, just as we did not plan to defeat the Warsaw Pact on our own. But it also means that we need balanced, coherent forces which are capable of operating effectively alongside forces from other countries (including in NATO's Rapid Reaction Corps, which Britain leads), and that this requirement must be reflected in training and equipment. Our conclusion is that an ability to make a contribution of this kind to multinational operations will enable us to meet our national commitments as well.

14. High-Intensity and Low-Intensity operations. In the past, a contrast has sometimes been drawn between the high-intensity capabilities required for warfighting and the low-intensity capabilities which suffice for other operations such as peacekeeping - between, for instance, tanks on the one hand and light infantry in blue berets on the other. This is an artificial distinction. Recent experience has shown that enforcing and keeping the peace may require the deployment of forces trained for modern conventional warfare and equipped with battle-winning capabilities such as aircraft carriers, submarines, tanks, artillery, attack helicopter and combat aircraft. And the capabilities an operation requires may vary over time, as has been the case in Bosnia. We therefore need a balanced and coherent spectrum of capabilities, which collectively provide a range of deployment options.

15. Trends in military capabilities. Our analysis of force development identified a number of increasingly important capabilities:

- command, control, communications and computers, and intelligence,

surveillance, target acquisition and reconnaissance (ISTAR) are crucial to the exploitation of information to facilitate the effective employment of combat power;

– the trend towards force projection operations, for which we may need to deploy very rapidly in order to be successful, places an increasing premium on transport or lift capabilities;

– combat service support (logistics, equipment and medical support) is key to sustaining deployed operations, particularly those of significant duration;

– protection against chemical and biological weapons will be critically important in some of the regions in which we are likely to have to operate, such as the Gulf;

– Special Forces are likely to be essential in all warfighting operations;

– air manoeuvre forces will be increasingly central to high intensity land operations as their tempo continues to increase.

Some other capabilities remain very important, but improvements in the range and precision of weapons mean that we no longer need them in the same quantity as during the Cold War. And some capabilities are of declining relative importance. This applies in particular to the direct defence of the United Kingdom itself and to open-ocean maritime operations. In a number of cases, changes of emphasis are already in train. Elsewhere, the Review has re-balanced the force structure, to provide a coherent set of capabilities for the operations we now need to plan for.

Joint Rapid Reaction Forces

16. Joint operations are one of the main themes of the Review. The most important development in the force structure is the creation of a pool of Joint Rapid Reaction Forces to bring together all readily available forces from the three Services. From this pool we will be able to draw the right force packages to mount short-notice brigade level or equivalent force projection operations of all kinds across the crisis spectrum. Joint Rapid Reaction Forces are described in full in the essay on joint operations, but the measures set out below should be seen in the context of the Joint Rapid Reaction Force concept.

Shortfalls

17. The Review has given high priority to addressing shortfalls in our capability to undertake force projection operations.

18. Strategic Lift. We cannot at present deploy Joint Rapid Reaction Forces quickly enough to

meet operational requirements in the changed strategic environment, nor is commercial shipping or airlift likely to be available in sufficient quantities to meet rapid deployment deadlines, although it will have an important place in transporting follow-on forces. Our tactical capabilities are already being improved by introducing additional support helicopters and replacing our oldest Hercules aircraft by the new C-130J version. A wide range of options was considered for enhancing the strategic sea and air transport fleets. The following is the most effective alternative in military and resource terms:

- acquire four additional roll-on roll-off container ships to join the two now entering service. It may be possible to do so using Public Private Partnership;
- in the short term, meet our strategic airlift needs with four C-17 large aircraft or their equivalent;
- in the longer term, we need to consider a suitable replacement for our remaining elderly transport aircraft, for which the proposed European Future Large Aircraft is a contender.

Bids will be invited to meet the short-term and long-term air transport requirements in parallel competitions. Requests for proposals will be issued later this year, and we would hope to make decisions on procurement by early 2000. We will also be issuing requests for information for a new tanker aircraft for air-to-air refuelling.

19. Enhanced logistic support. The current logistic support structure cannot sustain prolonged or simultaneous operations. A package of measures will address the worst of these deficiencies by:

- establishing two well-found logistic lines of communication to support two concurrent medium scale deployments;
- creating a joint force logistics component commander and headquarters for each to co-ordinate joint support assets;
- enhancing the ability of the Royal Air Force to conduct operations from remote locations with little or no infrastructure by providing the logistic support needed for deployed operating bases;
- addressing key shortfalls in weapon systems and spares for critical equipments, including missiles and ammunition;
- organising logistic support forces so that early-entry capabilities are provided by Regular personnel, with greater use of Reserve and contractor personnel for

follow-on support once the operation has been established.

The overall effect of these measures will be to provide more effective support for deployed forces and to reduce the current overstretch problem faced by personnel in many logistic specialisations.

20. Enhanced medical support. Medical support is another area in which there are serious shortfalls, both in peacetime care and in operational medical support. The Government will therefore make a significant investment in additional equipment and personnel. Key improvements will include:

- establishment of a new Regular ambulance regiment;
- the updating of current afloat medical support facilities;
- acquisition of an additional 200-bed primary casualty receiving ship; and
- enhanced ground and aeromedical evacuation capabilities.

To meet the requirement for extra medical personnel, the Regular element of the Defence Medical Services will be increased. But it is neither militarily sensible nor cost effective to rely solely on Regular personnel. We will therefore use the compulsory call-out of medical Reserves to augment Regular field hospitals for combat operations at the equivalent of brigade level or above. Work is under way to establish the best ways of achieving this.

Joint enabling capabilities

21. The Review has sought to reflect and reinforce the increasingly joint nature of operations and the force structure. A number of capabilities common to more than one Service have a crucial enabling role:

- significant improvements in tactical communications and command and control systems, such as the Joint Tactical Information Distribution System, the Joint Operational Command System, and the Theatre Wide Area Communications Network, are already in hand. To exploit this, we are creating a fully-equipped Joint Task Force Headquarters, capable of very rapid deployment for the command and control of our Joint Rapid Reaction Forces, and forming the nucleus of a second Headquarters which could take command of a separate, concurrent deployment;
- continued investment in key ISTAR projects, such as the Astor airborne stand-off radar, the Phoenix remotely piloted vehicle and the Cobra counter-battery

radar, will significantly improve the effectiveness of British forces in future conflicts;

- we have confirmed plans to enhance the support helicopter force by procuring 22 Merlin support helicopters and 14 Chinook HC2A/3. Their overall military effectiveness will be increased by establishing a new Joint Helicopter Command to co-ordinate the use of all battlefield helicopters;

- the Review has confirmed the importance of our highly-regarded Special Forces capability in a broad variety of roles, and we will continue to invest in high-quality personnel, training and equipment.

Maritime capabilities

22. Maritime forces are inherently well suited to most force projection operations. Their reach, ability to sustain themselves without reliance on host nation support and flexibility are invaluable attributes. A joint maritime force often provides the opportunity for early and timely intervention in potential crises. Recent events in the Gulf have demonstrated the ability of maritime forces in this respect. In almost all operations, maritime forces will be essential to help deliver ground forces to the theatre. And they can make a vital contribution to humanitarian and disaster relief operations, as seen recently in Montserrat.

23. Against this background, the Review suggested a continuing shift in focus away from large-scale open-ocean warfare towards a wide range of operations in littoral areas. This reflects changes in the potential maritime threat, especially relative to NATO, the missions of our forces and the likely geographic location of future operations. These changes are a continuation of trends since the end of the Cold War. They include a decline in the likelihood of an open-ocean anti-submarine or anti-surface threat on the scale previously envisaged. Similarly, the size of the mine countermeasures force must take account of the reduced threat in home waters. By contrast, we need to be better able to conduct combat operations in littoral areas, to take better advantage of the contribution of maritime platforms in the force projection role, and to have the capacity to undertake prolonged peace support commitments and day-to-day tasks without overstretching our forces.

24. To achieve this the Government will maintain strong and well- balanced maritime forces but with some changes of emphasis. The Strategic Defence Review will:

- maintain plans to modernise the destroyer and frigate force with a new class of Common New Generation Frigates but reduce overall strength from 35 to 32 (this figure is based on two concurrent medium scale deployments, which is the most demanding requirement for the destroyer and frigate force);

- continue modernisation of the nuclear-powered attack submarine force but

reduce strength from 12 to ten in the longer term. All ten attack submarines will, however, be equipped to fire Tomahawk land attack missiles to increase their utility in force projection operations (this compares with previous plans to fit only seven submarines for the Tomahawk system);

- modernise the mine countermeasures force and continue to increase its strength (currently 19 vessels), but limit the increase to 22 rather than 25 by paying off three older vessels;

- maintain a full Commando Brigade and its specialist shipping, and continue the modernisation programme, which began with introduction of the helicopter carrier, HMS OCEAN, by procuring two landing platform docks and two landing ships logistic to replace current vessels;

- retain all three Invincible Class aircraft carriers and their associated aircraft, and increase their utility by developing further their use by Royal Air Force as well as Royal Navy aircraft; and

- continue plans to purchase 44 Merlin anti-submarine helicopters but place no further orders. In addition, ten Lynx Mk3 helicopters will be converted to Mk8 standard for operation from destroyers/frigates;

- retain the comprehensive afloat support capability provided by the Royal Fleet Auxiliary, and continue planned modernisation by procuring two auxiliary oilers as replacements for the current vessels.

In addition, the dedicated fishery protection force will be reduced by one vessel following the decision of the Scottish Fisheries Protection Agency to move to the sole use of civil contractors to carry out this role in Scottish waters.

25. This rebalancing will be matched by adjustments to peacetime tasks where necessary to ensure that overstretch is addressed. At the same time, we will take action to remedy longstanding undermanning within the Royal Navy. In the first instance, most personnel released by the changes set out above will be redeployed across the Service to ameliorate current shortfalls. Once manpower problems have been solved the net effect of the Review on the Navy's Regular manpower requirement will be a reduction of some 1,400.

26. Future Aircraft Carriers and Carrier-borne aircraft. One of the key longer-term issues in the Review has been whether to replace the current generation of aircraft carriers and their aircraft, and if so with what. Our conclusion is that the ability to deploy offensive air power will be central to future force projection operations. But we cannot be certain that we will always have access to suitable air bases. Even when we do, experience has shown that bases may

not always be available in the early stages of a crisis, and that their infrastructure is not always able to support the full range of operations required. In these and a range of other operational circumstances, aircraft carriers can provide valuable flexibility. They can also offer a coercive presence which may forestall the need for warfighting, as recently in the Gulf. We judge that there is therefore a continuing need for Britain to have the capability offered by aircraft carriers.

27. The Invincible Class carriers were designed for Cold War anti-submarine warfare operations with helicopters and a limited air defence capability provided by a small number of embarked Sea Harriers. This is no longer the main requirement. The emphasis is now on increased offensive air power, and an ability to operate the largest possible range of aircraft in the widest possible range of roles.

28. When the current carrier force reaches the end of its planned life, we plan to replace it with two larger vessels. Work will now begin to refine our requirements but present thinking suggests that they might be of the order of 30,000-40,000 tonnes and capable of deploying up to 50 aircraft, including helicopters. Our intention is that they will be built using all relevant cost-saving techniques, following the example of HMS OCEAN. No decisions have been taken on a future carrier-borne aircraft but a version of the Joint Strike Fighter currently under development in the United States remains a strong contender. We are therefore participating in the concept demonstration phase of the programme.

29. To get the maximum military output from this major investment, Royal Navy Sea Harrier FA2 and Royal Air Force Harrier GR7 aircraft will combine in a new force able to operate from land or carriers. Joint Force 2000 will be a significant upgrading of Britain's maritime force projection capability.

Land capabilities

30. Both the Gulf Conflict and Bosnia have demonstrated that, notwithstanding technological advances, Britain still needs forces which can operate effectively on the ground, whether to enforce and keep the peace or to take and hold territory. Most of the warfighting capabilities used in the Gulf have also been required in Bosnia. The tempo of land operations is also increasing, putting a premium on forces which are deployable and mobile, but with sufficient protection and firepower for warfighting. The Army will therefore retain a balanced, combined arms, high capability structure of two deployable divisions, with some rebalancing to make existing forces more usable and to address overstretch in the current structure.

31. At present there are five deployable brigades (three armoured and two mechanised) with wide utility, together with three lighter and more specialised deployable brigades (one airborne, one airmobile and the Royal Marines Commando Brigade). Our forces must be trained effectively for warfighting operations, available both as part of the Joint Rapid Reaction Forces and as part of NATO's ACE Rapid Reaction Corps, and able to undertake prolonged

operations. This requires a balanced force structure and operational cycle, which we do not currently have. A force of six armoured and mechanised brigades achieves this and would improve significantly the Army's ability to deliver combat-ready formations. Because of its wider utility, a third mechanised brigade would also help to reduce overstretch, and we are therefore adopting this structure.

32. In addition, we can no longer identify circumstances in which Britain would need to undertake parachute operations at greater than battalion group level. Maintaining a smaller battalion-level capability, which confers important operational flexibility, and modernising the role of the remainder of the Parachute Regiment to take advantage of their unique skills and ethos, has been central to the Review. We also need to make better use of key front-line equipment such as tanks.

33. The Review will therefore make the following changes to the Army's operational structure:

- 5 Airborne Brigade will be converted into a third mechanised brigade. The battalion-level airborne role will be transferred to 24 Airmobile Brigade which, when the Attack Helicopter enters service, will be developed into a new high capability air manoeuvre formation, forming part of the Joint Helicopter Command, and including two battalions of the Parachute Regiment;
- we will retain the ability to generate a division of three armoured brigades for warfighting operations, but adopt a militarily more effective structure for their component units. Instead of the eight small armoured regiments, each with 38 tanks and 470 personnel, planned previously, there will be six larger ones each with 58 tanks and 600 personnel. In parallel, the Army will adopt a "whole fleet management" approach to the tank fleet. Each regiment will hold only the 30 tanks it needs on a day-to-day basis to achieve required training standards. The balance required to bring regiments up to warfighting strength will be provided prior to deployment for operations. This will allow us to make better use of the new Challenger 2 tank fleet and reduce costs with no operational penalty;
- the two armoured regiments released as a result will be re-roled, one as the Army's contribution to the new joint capability for nuclear, biological and chemical defence, the other as a new armoured reconnaissance regiment;
- the current total of 40 Regular infantry battalions will be maintained but we will reconfigure them to reflect the creation of the third mechanised brigade. In future we will have:

- nine instead of eight armoured infantry battalions,

- six instead of four mechanised infantry battalions,
- three parachute battalions of which one (rather than two as now) will be in-role at any time (the other battalions of the Parachute Regiment will be employed on other tasks), and
- 22 instead of 25 light infantry battalions.

Vehicles for the increased numbers of armoured and mechanised units will be made available by the more effective management of existing fleets;

– 15 Regular artillery regiments will be retained, although a light gun regiment will be re-roled to form a sixth AS90 regiment, and we will proceed with programmes for long-range precision munitions and for the Lightweight Mobile Artillery Weapon System;

– a sixth close support engineer regiment will be created, the engineer support provided to the air manoeuvre brigade will be increased from squadron to regiment level, and support to deployed air forces will be improved by forming two new Regular engineer squadrons and two new Regular signals squadrons;

– plans for future land weapon systems such as Medium Range TRIGAT and the Next Light Anti-Armour Weapon will be retained but planned numbers will be reduced to reflect the restructuring and changes to readiness.

34. Basing in Germany. The Government is committed to the principle of NATO Allies stationing forces on one another's territory, which is an important symbol of our mutual obligations. Moreover, although the specific military argument for stationing forces close to the Cold War front line has disappeared, there are still significant military benefits in having capable forces based in continental Europe, where they are closer to many potential theatres of operations and they can train more readily alongside our Allies. There is also the practical and economic question of how much additional military infrastructure and training the United Kingdom could readily accommodate. All these considerations have led us to conclude that the bulk of our current military presence in Germany should remain there.

35. Some reductions can, however, be made in that presence as part of Army restructuring. Three armoured regiments (including the two to be re-roled) and a number of supporting units will be removed from the front line in Germany and returned to the United Kingdom, totalling about 2,500 military personnel and some 186 tanks.

36. Army Manpower. In overall terms, the size of the Regular Army will rise by some 3,300 personnel, with increases particularly in signals, engineer and logistics troops. Combined with

the restructuring described above, we believe that this will eventually remedy overstretch in the force structure.

Air capabilities

37. Air power remains a fundamental component of warfighting capability, complementing maritime and ground forces, and providing an offensive capability in its own right which will be enhanced by the increasing precision of air-delivered weapons. It has also proved its utility in non-warfighting operations, including the enforcement of no-fly zones and humanitarian deployments. The Review has concluded that Britain should therefore retain a balanced mix of aircraft, including offensive support, air defence, ISTAR and maritime patrol, airborne early warning, transport and tanker aircraft, and support and search and rescue helicopters. Our work has, however, identified a number of areas in which adjustments are necessary to reflect changes in the scale and readiness required for likely future operations.

38. Most of the Royal Air Force front line will remain unchanged. The main decisions taken in the Review are as follows:

- most importantly, to maintain the Government's commitment to acquire 232 Eurofighters to replace the Tornado F3 and Jaguar in the air defence and offensive air support roles, with a front line establishment of around 140 aircraft. Eurofighter will be the primary component of the Royal Air Force future fighting capability and a vital element in Britain's overall defence effort;
- to retain in service all three types of offensive air support aircraft (Tornado GR, Harrier and - until replaced by Eurofighter - Jaguar) but reduce their front-line establishment from 177 to 154 aircraft, and from 14 to 13 squadrons. This reduction would comprise 12 Tornado GR1s, nine Harriers and two Jaguars. For operations carrying longer warning times we will continue to be able to increase the number of aircraft available by making use of the operational conversion units;
- to make a small reduction in the establishment of the Tornado F3 air defence force from 100 to 87 aircraft, and from six to five squadrons. We would again plan to make use of the operational conversion unit in some contingencies;
- continue with procurement of the Brimstone and Stormshadow air-to-surface missiles, and with plans to procure a beyond visual range air-to-air missile for the Eurofighter fleet;
- develop a new collision warning system for the Tornado GR4, to enter service early in the next century;

- make a small reduction in the RAF Regiment's squadron strength, from 14 to 13, but give them an enhanced nuclear, biological and chemical defence role as part of a new joint Service capability;

- maintain the search and rescue force and make it more cost-effective by greater use of civilianisation in non-deployable posts.

39. As with the Royal Navy and the Army, the first priority for manpower released by these changes will be to reduce undermanning in the Royal Air Force as a whole. Once full manning has been achieved, the net effect of the Review on Regular RAF manpower will be broadly neutral.

40. Future Offensive Air System. Future offensive air power requirements have been studied in conjunction with future aircraft carriers and carrier-borne aircraft. The proposals developed in the maritime context will meet a substantial part of Britain's overall future offensive airpower needs. There will, however, be an important requirement to replace in around 20 years' time the capability currently provided by the Tornado GR fleet in the offensive support role. No immediate decision is necessary on how we should do so, but we will continue to study how best to meet the requirement, giving consideration to cruise missiles and remotely piloted/unmanned air vehicles as well as manned aircraft.

Reserve Forces

41. As noted above the risk of a strategic attack on NATO is now so remote that Britain does not need to maintain forces specifically against such a contingency. There is therefore no longer a requirement for large numbers of Reserves in this role. But recent experience, in the Gulf and in Bosnia, has underlined the value of the contribution the Reserves can make in operations from peace support to regional conflict. The Reserves also have a vital role in defence as a link between the Armed Forces and Society. The Reserves, and in particular the Territorial Army, will therefore continue to have a central part to play in Britain's defence. But to play that part effectively, they must change. If they do not, the Reserves face marginalisation and decline.

42. The Government is determined that this will not happen and that the Reserves will not fade into our history. The Review will therefore:

- increase the strength of the Royal Naval Reserve (by about 350) and the Royal Air Force Reserve (by about 270), and make them even more usable;

- give the Territorial Army new roles, and integrate them more closely with the Regular Army. The primary emphasis will be on key support and medical tasks, making maximum use of the skills and enthusiasm that Reserve soldiers

contribute;

– reduce the size of the Territorial Army from around 56,000 to a more compact and usable force of about 40,000;

– make more use of Territorial Army personnel across the spectrum of defence Missions, including through greater use of call-up to undertake force projection operations;

– establish a dedicated Army Mobilisation Centre to overcome problems experienced by Reservists in recent operations;

These changes are explained in greater detail in the separate essay on Reserve Forces.

Modern Forces for the Modern World

43. The Government promised at the outset of the Strategic Defence Review that the process would be foreign policy-led, identifying what our forces need to be able to do and making sure that they had the necessary capabilities. This promise has been kept. We have identified the Missions and Military Tasks our forces must be able to undertake in support of Britain's foreign and security policy, and force structures have been derived directly from an analysis of those Tasks, informed by the planning assumptions we have developed and our strategic priorities. The Review has produced a clear and coherent force structure for Britain's Armed Forces in the next century.

Annex A to Future Military Capabilities Essay

Missions and Military Tasks

A1. To ensure that the aims and objectives of foreign and security policy are properly reflected in defence planning, they need to be developed into specific functions for which the Armed Forces must be trained and equipped. Until recently, the Ministry of Defence planned to undertake three Defence Roles:

Defence Role One: to ensure the protection and security of the United Kingdom and our Dependent Territories even when there is no major external threat.

Defence Role Two: to insure against a major external threat to the United Kingdom and our Allies.

Defence Role Three: to contribute to promoting the United Kingdom's wider

security interests through the maintenance of international peace and stability

These Roles were further broken down into some 50, more specific, Military Tasks.

A2. Whilst the Defence Roles were a valuable step forward, their utility for detailed defence planning has lessened with the changes to the strategic environment in recent years. For example, they did not give sufficient prominence to the range of different operations covered by Role Three. We had already begun to move to an alternative approach based on Missions, and the Review has further developed and refined this. The eight Missions shown below provide a more accurate and balanced statement of what our Armed Forces are for, and a clearer and more coherent basis for defence planning. The Missions are deliberately not placed in any order of priority, and the sequence in which they appear has no significance for planning purposes.

THE MISSIONS OF THE ARMED FORCES

Defence policy requires the provision of forces with a high degree of military effectiveness, at sufficient readiness and with a clear sense of purpose, for conflict prevention, crisis management and combat operations. Their demonstrable capability, conventional and nuclear, is intended to act as an effective deterrent to a potential aggressor, both in peacetime and crisis. They must be able to undertake a range of Military Tasks to fulfil the Missions set out below, matched to changing strategic circumstances.

A: Peacetime Security: To provide forces needed in peacetime to ensure the protection and security of the United Kingdom, to assist as required with the evacuation of British nationals overseas, and to afford Military Aid to the Civil Authorities in the United Kingdom, including Military Aid to the Civil Power, Military Aid to Other Government Departments and Military Aid to the Civil Community.

B: Security of the Overseas Territories: To provide forces to meet any challenges to the

external security of a British Overseas Territory (including overseas possessions and the Sovereign Base Areas) or to assist the civil authorities in meeting a challenge to internal security. (An amendment to legislation in due course will formalise the change of title from "Dependent Territories" to "Overseas Territories".)

C: Defence Diplomacy: To provide forces to meet the varied activities undertaken by the Ministry of Defence to dispel hostility, build and maintain trust, and assist in the development of democratically accountable armed forces (thereby making a significant contribution to conflict prevention and resolution).

D: Support to Wider British Interests: To provide forces to conduct activities to promote British interests, influence and standing abroad.

E: Peace Support and Humanitarian Operations: To contribute forces to operations other than war in support of British interests and international order and humanitarian principles, the latter most likely under UN auspices.

F: Regional Conflict Outside the NATO Area: To contribute forces for a regional conflict (but not an attack on NATO or one of its members) which, if unchecked, could adversely affect European security, or which could pose a serious threat to British interests elsewhere, or to international security. Operations are usually under UN or Organisation for Security Co-operation in Europe auspices.

G: Regional Conflict Inside the NATO

Area: To provide forces needed to respond to a regional crisis or conflict involving a NATO ally who calls for assistance under Article 5 of the Washington Treaty.

H: Strategic Attack on NATO: To provide, within the expected warning and readiness preparation times, the forces required to counter a strategic attack against NATO.

A3. For planning purposes, a further level of detail is needed below the Missions against which forces can be assigned. The concept of Military Tasks remains the best way of meeting this requirement. We have, however, sought to improve on previous attempts to define the functions of the Armed Forces by focusing as far as possible on outputs (such as peace enforcement) rather than inputs (such as the elements assigned to particular NATO force categories). In the process, we have also rationalised the set of Tasks, from 50 to 28. This does not imply that the Armed Forces have less to do! It simply reflects a more focused analysis, minimising the duplication which was a feature of the Tasks under the three Defence Roles.

A4. The Military Tasks are set out below, with a short explanation of each. Although the Tasks are numbered for reference purposes, they are again not in any order of priority.

PEACETIME SECURITY

A5. MT1: Military Aid to the Civil Power in Great Britain

Military Aid to the Civil Power in Great Britain is provided for the direct maintenance or restoration of law and order in situations beyond the capacity of the civil power to resolve in any other way.

A6. MT2: Military Aid to the Civil Power in Northern Ireland

Military Aid to the Civil Power in Northern Ireland supports the Royal Ulster Constabulary in maintaining law and order and combating terrorism through the conduct of operations to deter terrorist activity.

A7. MT3: Counter Drugs Operations

Military forces are made available upon request, where operational commitments and

resources allow, to support the counter-drugs activities of law enforcement agencies in the United Kingdom and the Overseas Territories, and in support of the international counter-drugs effort.

A8. MT4: Military Aid to Other Government Departments

Military Aid to Other Government Departments is the use of military forces for non-military Government tasks, including fishery protection and hydrographic tasks.

A9. MT5: Military Aid to the Civil Community

Military Aid to the Civil Community is the provision of Service personnel and equipment, both in emergencies and in routine situations, to assist the community at large.

A10. MT6: Military Search and Rescue in Peacetime

The Armed Forces provide a 24-hour peacetime search and rescue capability, with the priority task of rescuing Service personnel in the United Kingdom and surrounding seas. Search and Rescue for the civil community is provided in conjunction with other relevant agencies.

A11. MT7: Nuclear Accident Response

The Department maintains a capability for nuclear accident response to ensure, in conjunction with civil agencies, an effective response to incidents or accidents in the United Kingdom involving nuclear weapons, defence nuclear materials or naval reactors; and, when requested, to provide assistance to civil authorities in accidents with civil nuclear facilities.

A12. MT8: Integrity of United Kingdom Waters in Peacetime

To demonstrate British sovereignty within and ensure the integrity of the United Kingdom's territorial waters (and where necessary to protect the United Kingdom's rights and interests in the surrounding seas), a military presence is maintained which provides routine sea and air surveillance of these waters in peacetime.

A13. MT9: Integrity of United Kingdom Airspace in Peacetime

A continuous recognised air picture and an air policing capability is needed to maintain the integrity of the United Kingdom's airspace, and meet NATO commitments in the United Kingdom Air Defence Region.

A14. MT10: Intelligence

Defence intelligence collection, processing and analytical capability is required to support policy makers, planners and operational commanders.

A15. MT11: Hydrographic, Geographic and Meteorological Services

Hydrographic surveying and geographic mapping and survey services are a defence responsibility because of the security aspects of providing hydrographic support for the strategic deterrent, anti-submarine warfare and mine countermeasures operations, and the need to maintain a survey capability for operations and emergencies. The Meteorological Office provides essential meteorological services and weather forecasts for the Armed Forces; and undertakes meteorological and climate research activities in order to retain Britain's world class reputation in meteorology.

A16. MT12: Evacuation of British Citizens Overseas

In cases where civil contingency plans prove insufficient, defence capabilities held for other purposes may be used to evacuate United Kingdom entitled personnel from countries where their lives may be at risk.

A17. MT13: Public Duties and VIP Transport

The Department provides military personnel for state ceremonial and routine public duties, and secure air transport for the use of the Royal Family and senior members of the Government.

SECURITY OF THE OVERSEAS TERRITORIES

A18. MT14: Security of the Overseas Territories

The Ministry of Defence is responsible for the external security of Britain's Overseas Territories, and provides support and assistance to the civil authorities as required.

A19. MT15: Security of the Cyprus Sovereign Base Areas and Territorial Waters

The British presence in the Sovereign Base Areas of Cyprus provides strategic communications facilities, a base for operations in the Eastern Mediterranean and beyond, military search and rescue, and training facilities.

DEFENCE DIPLOMACY

A20. MT16: Arms Control, Non-Proliferation, and Confidence and Security Building Measures

The Ministry of Defence provides military and civilian personnel in support of arms control, non-proliferation and confidence and security-building regimes. It also supports export control regimes and arrangements. In addition, the Ministry of Defence is responsible for ensuring that Britain retains the ability to achieve political and military objectives despite the presence, threat or use of nuclear, biological or chemical weapons and their means of delivery.

A21. MT17: Outreach

The Outreach programme is designed to contribute to security and stability in Central and Eastern Europe, the Caucasus and Central Asia through bilateral assistance to and co-operation with the countries concerned.

A22. MT18: Other Defence Diplomacy Activities

The Ministry of Defence undertakes military assistance activities with overseas military forces and defence communities (not already covered under the Outreach programme under MT17) to help to dispel hostility, build and maintain trust, and assist in the development of democratically accountable armed forces.

SUPPORT TO WIDER BRITISH INTERESTS

A23. MT19: Support to Wider British Interests

The Ministry of Defence conducts activities to promote British interests, influence and standing abroad, including in relation to Brunei, the Five Power Defence Arrangements and support to defence exports.

PEACE SUPPORT AND HUMANITARIAN OPERATIONS

A24. MT20: Humanitarian Operations and Disaster Relief Outside the United Kingdom and Overseas Territories

Humanitarian crises and disasters, if not addressed rapidly and effectively at an early stage, can often lead to potentially serious conflicts. When appropriate, and at the request of the Foreign and Commonwealth Office or Department for International Development, the Armed Forces contribute to humanitarian and disaster relief operations, either on a national basis or as part of a co-ordinated international effort.

A25. MT21: Peacekeeping; MT22: Peace Enforcement

Prevention, containment and resolution of conflict is a vital element in the maintenance of international stability and security. We will therefore make an appropriate contribution, in concert with other nations, to both peacekeeping and peace enforcement operations. Peacekeeping operations are conducted with the consent of the disputing parties in order to support the achievement of a long term peace settlement. Peace enforcement operations are conducted in circumstances where there is no peace or peace process to which all the relevant parties are committed; such operations are coercive in nature, and require warfighting capabilities sufficient to ensure compliance.

REGIONAL CONFLICT OUTSIDE THE NATO AREA

A26. MT23: Regional Conflict outside the NATO Area

Inter-state conflicts may arise, outside the territory of NATO members, to which Britain may wish to respond along with other countries, to support other allies and partners, to protect our national interests, and to uphold international law and stability.

REGIONAL CONFLICT INSIDE THE NATO AREA

A27. MT24: Regional Conflict inside the NATO Area; MT25: Major Regional Conflict inside the NATO Area

Under Article 5 of the Washington Treaty, Britain would assist any NATO Ally or Allies under armed attack in Europe or North America by taking appropriate action, including the use of armed force. Britain's force planning to meet this commitment is based on the contingency of a regional conflict involving aggression against a NATO member. This may include the predeployment and reinforcement of forces during a time of tension in order to deter aggression. The distinction between the two Tasks reflects the different scales of threat which potential future adversaries could pose in a regional context. The full range of Britain's military capabilities, including our nuclear forces, is available to NATO.

A28. MT26: Military Home Defence

The Government has an obligation to ensure the provision of critical services and the functioning of government itself during times of crisis and conflict. This is achieved primarily by the protection of critical installations and information systems.

A29. MT27: Nuclear Forces

Britain's Trident force provides an operationally independent strategic and sub-strategic nuclear capability in support of NATO's strategy of war prevention and as the ultimate guarantee of our national security. In current circumstances, nuclear forces continue to make a

unique contribution to ensuring stability and preventing crisis escalation. They also help guard against any possible re-emergence of a strategic scale threat to our security.

STRATEGIC ATTACK ON NATO

A30. MT28: Strategic Attack on NATO

This Task is concerned with the very remote risk of the emergence of a massive military threat to NATO territory, with the ability to mount major offensive operations on two or more fronts. In the current security environment, no forces are maintained specifically against it, although we retain the ability to reconstitute forces in the event of the emergence of such a major threat.

Determining the force structure

A31. To determine the conventional forces required to carry out these Missions, we used a process of assigning force elements to Military Tasks known as force summation. This process identified forces committed to a Task at any one time (such as infantry battalions deployed in Northern Ireland) and those held contingent for a Task (such as infantry battalions which might need to be deployed as part of our commitment to NATO). It produced the total requirement for each force element, taking account of judgements about the requirements of each Military Task, and the main scale of effort and concurrency permutations discussed in the main essay. The total requirement for each force element was determined by the largest figure derived from these permutations. The main factors driving the force structure proved to be two concurrent medium scale operations or a single full scale operation. Readiness assumptions were then applied to establish which force elements must be Regular and which could be Reserves.

A32. Finally, a range of additional factors were used to take account of our experience of the numbers actually required to produce the force structure needed for operations. These factors comprise:

- generation - for the Royal Navy this covers ships engaged in the training and trials needed to prepare for operations, for the Army it reflects differences between peacetime and wartime establishments (e.g. an armoured infantry battalion comprises three rifle companies in peacetime but would deploy for warfighting with four companies), and for the Royal Air Force, the fact that aircraft are used more intensively when deployed on operations means that more crews and additional aircraft are required to complete the training task in peacetime, so in order to deploy a given number of aircraft on operations, a higher number is required in peacetime (the crew/airframe ratio is 1.33:1 in peacetime, 1.5:1 for non-warfighting deployments and 2.0:1 for combat operations);
- maintenance - this reflects the Royal Navy's refit cycle and the average number

of ships in refit at any one time;

– rotation - to maintain a commitment for a prolonged period while ensuring operational effectiveness and without placing undue strain on the personnel concerned, we must maintain a pool of forces to rotate through the deployed force. Experience shows that the optimum ratio for prolonged commitments is in the region of three or four ships, five army units and three or four RAF squadrons for each one deployed. We have assumed that these guidelines would be breached in the event of major warfighting operations or for two concurrent medium scale operations;

– regeneration - this applies to combat aircraft and reflects our ability to use operational conversion units, in an operational role, primarily in the event of a major NATO regional conflict for which there would be a prolonged period of warning time, but also for some sustained commitments;

– choice - for some Military Tasks we need to maintain a range of capabilities to reflect possible alternative requirements (e.g. a package of combat aircraft might need to focus on air defence, offensive air support or a mixture of the two).

A33. As a supplement to force summation, we also used a scenario-based analysis to assess the forces necessary for force projection operations at medium and large scales of effort. This process was known as force estimation. It employed a range of contingencies, some based on recent operations, and the results were used to validate the force summation process.

A34. The force structure resulting from the force summation work is set out in the three sets of tables in [Annex B](#), together with the factors from which they have been derived:

– the first set assigns force elements to Military Tasks, and indicates whether they are committed or contingent to that Task. The table does not show those Military Tasks which have no forces specifically assigned to them. Nor does it cover MT10: Intelligence, which has been excluded for security reasons;

– the second set shows the number of each force element required to undertake the two main scale of effort and concurrency permutations - two medium scale deployments and a full scale deployment. They also show the impact of continuing other commitments in parallel and the factors discussed in paragraph A32 above. Royal Navy and combat aircraft totals have been rounded to the nearest whole number;

– the third set summarises for each force element the numbers held now and those that will be held once the Review has been implemented.

Annex B to Future Military Capabilities Essay

FORCE ELEMENT TABLES

GENERAL NOTES

The tables show planned post-SDR implementation force levels.

Only Regular Army Force Elements are shown as the revised structure of the Territorial Army has yet to be determined.

The Infantry Battalions Force Element covers all infantry tasks, some of which are planned to be undertaken by other units out of role, e.g. Armoured and Artillery Regiments and RM Commandos. The Force Element also includes the Armour Delivery role which will be undertaken by forces drawn from Infantry Battalions.

Engineer Regiments include the Military Works Force.

Equipment Support Battalions (REME) exclude the REME Battalion (Aviation) but include the REME Battalion in Northern Ireland.

The Royal Logistics Corps Regiments (Close and General Support) Force Element includes the Logistics Battalions supporting 24 Airmobile Brigade and 3 Cdo Brigade and the resident Regiment in Northern Ireland.

The Support Helicopters Force Element covers Puma, Chinook, Sea King 4 and Merlin Mk3 Support Helicopters. As these helicopter types vary in terms of range, endurance and carrying capacity we have expressed all numbers in terms of Chinook equivalents.

- Table 1 - [Mission: Peacetime Security \(MTs 1-7\)](#)
- Table 2 - [Mission: Peacetime Security \(MTs 8 & 9, 12 & 13\)](#)
- Table 3 - [Mission: Security of the Overseas Territories \(MTs 14 & 15\)](#)
- Table 4 - [Mission: Support to Wider British Interests \(MT 19\)](#)
- Table 5 - [Mission: Peace Support & Humanitarian Operations \(MTs 21 & 22\)](#)
- Table 6 - [Mission: Regional Conflict Outside the NATO Area \(MT 23\)](#)
- Table 7 - [Mission: Regional Conflict Inside the NATO Area \(MTs 24 & 25, 26, 27\)](#)
- Table 8 - [Concurrency: Two Concurrent Medium Scale](#)
- Table 9 - [Concurrency: Full Scale](#)
- Table 10 - [Force Levels](#)

Engineer Regiments		1	1.33					
Equipment Support Battalions (REME)			1					
Field Hospital								
Infantry Battalions		1	12 (1)	1				
NBC Regiment								
Royal Logistics Corps Regiments (Close and General Support)			1					
Airborne Early Warning Aircraft		1				1		
Air Defence Aircraft		2				2		
Maritime and Reconnaissance Aircraft		3		2		6		1
Offensive Air Support Aircraft		1						1
RAF Regiment Squadrons (Field and Rapier)			1					1
Support Helicopters		6.91	4.5	2				1.25
Transport and Tanker Aircraft		7		5		1		6

(1) Total of infantry tasks, not all of which would be carried out by Infantry Battalions.



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

**Table 2:
Mission: Peacetime Security**

MTs 8 & 9, 12 & 13

Force Element						
	Ctt'd	Cont	Ctt'd	Cont	Ctt'd	Cont
Aircraft Carriers				1		
Amphibious Ships				7		
Attack Submarines				2		
Destroyers and Frigates		3 (1)		4		
Minewarfare Vessels		4		4		
RM Commando				3		
Royal Fleet Auxiliary Vessels				6		
Strategic Deterrent Submarines						
Armrd & Recce Regiments				0.33	(2)	
Army Air Corps Regiments						
Artillery Regiments				2	(2)	
Engineer Regiments				1.33		
Equipment Support Battalions (REME)						

Field Hospital				0.5		
Infantry Battalions				2	3.25	
NBC Regiment						
Royal Logistics Corps Regiments (Close and General Support)				2		
Airborne Early Warning Aircraft		2		2		
Air Defence Aircraft	2			18		
Maritime and Reconnaissance Aircraft		12		5		2
Offensive Air Support Aircraft				18	1	
RAF Regiment Squadrons (Field and Rapier)				4		
Support Helicopters				19		
Transport and Tanker Aircraft		1		51		

(1) Part of the deployed force at Full Scale.

(2) The Household Cavalry Mounted Regiment and King's Troop Royal Horse Artillery are committed to Public Duties but are not included here because they do not contribute to any other MTs and are not included in the force levels.

MT 10: Intelligence - not shown for security reasons.

MT 11: Hydrographic - not shown because the units principally involved are not shown in the list of Force Elements.



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

**Table 3:
Mission: Security of the Overseas Territories**

MTs 14 & 15

Force Element	Security of Overseas Territories (including Cyprus) MTs 14 & 15	
	Committed	Contingent
Aircraft Carriers		1
Amphibious Ships		8
Attack Submarines		3
Destroyers and Frigates	2	9
Minewarfare Vessels		6
RM Commando		3
Royal Fleet Auxiliary Vessels	2	8
Strategic Deterrent Submarines		
Armrd & Recce Regiments		1.33
Army Air Corps Regiments		1
Artillery Regiments		2
Engineer Regiments	0.49	4.66
Equipment Support Battalions (REME)		

Field Hospital		2
Infantry Battalions	2	3
NBC Regiment		
Royal Logistics Corps Regiments (Close and General Support)		3
Airborne Early Warning Aircraft		3
Air Defence Aircraft	4	33
Maritime and Reconnaissance Aircraft		5
Offensive Air Support Aircraft		42
RAF Regiment Squadrons (Field and Rapier)	1	5
Support Helicopters	1	26.50
Transport and Tanker Aircraft	2	62



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

**Table 4:
Mission: Support to Wider British Interests**

MT 19

Force Element	Support to Wider British Interests MT 19	
	Committed	Contingent
Aircraft Carriers		
Amphibious Ships		5
Attack Submarines		1
Destroyers and Frigates		2
Minewarfare Vessels		
RM Commando		1
Royal Fleet Auxiliary Vessels		3
Strategic Deterrent Submarines		
Armrd & Recce Regiments		0.66
Army Air Corps Regiments		
Artillery Regiments		1
Engineer Regiments		1
Equipment Support Battalions (REME)		

Field Hospital		
Infantry Battalions	1	2
NBC Regiment		
Royal Logistics Corps Regiments (Close and General Support)		1
Airborne Early Warning Aircraft		1
Air Defence Aircraft		6
Maritime and Reconnaissance Aircraft		2
Offensive Air Support Aircraft		
RAF Regiment Squadrons (Field and Rapier)		1
Support Helicopters		0.75
Transport and Tanker Aircraft		45



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

**Table 5:
Mission: Peace Support & Humanitarian Operations**

MTs 21 & 22

Force Element	Peace Keeping MT 21		Peace Enforcement MT22	
	Commtd	Contingent	Committed	Contingent
Aircraft Carriers		1		2
Amphibious Ships		6		9 (1)
Attack Submarines		1		3
Destroyers and Frigates		4	2	13
Minewarfare Vessels		4		8
RM Commando		1		3
Royal Fleet Auxiliary Vessels		5	1	8
Strategic Deterrent Submarines				
Armrd & Recce Regiments		1.66		9
Army Air Corps Regiments		0.33		4
Artillery Regiments		1		13
Engineer Regiments		1.44		9.66

Equipment Support Battalions (REME)		1.2		6
Field Hospital		0.5		3
Infantry Battalions	1	2		15
NBC Regiment				1
Royal Logistics Corps Regiments (Close and General Support)		1		3.5
Airborne Early Warning Aircraft		2		5
Air Defence Aircraft		14		33
Maritime and Reconnaissance Aircraft		5		10
Offensive Air Support Aircraft		24		74
RAF Regiment Squadrons (Field and Rapier)		1		9
Support Helicopters		20.5		47
Transport and Tanker Aircraft		51		82

(1) Second helicopter carrier could be provided by Aircraft Carrier in helicopter carrier role.



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

**Table 6:
Mission: Regional Conflict Outside the NATO Area**

MT 23

Force Element	Regional Conflict Outside the NATO Area MT23	
	Committed	Contingent
Aircraft Carriers		2
Amphibious Ships		9 (1)
Attack Submarines		3
Destroyers and Frigates		13
Minewarfare Vessels		8
RM Commando		3
Royal Fleet Auxiliary Vessels		8
Strategic Deterrent Submarines		
Armrd & Recce Regiments		9
Army Air Corps Regiments		4
Artillery Regiments		13
Engineer Regiments		9.66
Equipment Support Battalions (REME)		6

Field Hospital		3
Infantry Battalions		15
NBC Regiment		1
Royal Logistics Corps Regiments (Close and General Support)		3.5
Airborne Early Warning Aircraft		5
Air Defence Aircraft		33
Maritime and Reconnaissance Aircraft		10
Offensive Air Support Aircraft		74
RAF Regiment Squadrons (Field and Rapier)		9
Support Helicopters		47
Transport and Tanker Aircraft		82

(1) Second helicopter carrier could be provided by Aircraft Carrier in helicopter carrier role.



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

Table 7:

Mission: Regional Conflict Inside the NATO Area

MTs 24 & 25, 26, 27

Force Element	Regional Conflict Inside NATO and Military Home Defence MTs 24, 25 & 26		Nuclear Forces MT27	
	Commited	Contingent	Committed	Contingent
Aircraft Carriers		2		
Amphibious Ships		9 (1)		
Attack Submarines		4 (2)	2	1
Destroyers and Frigates	2 (3)	23 (4)	1	2
Minewarfare Vessels	2	15	1	3
RM Commando		3	0.5	
Royal Fleet Auxiliary Vessels		12	1	
Strategic Deterrent Submarines			1	3
Armrd & Recce Regiments		10		
Army Air Corps Regiments		4		
Artillery Regiments		13		

Engineer Regiments		9.66		
Equipment Support Battalions (REME)		6		
Field Hospital		3		
Infantry Battalions		24		5 (5)
NBC Regiment		1		
Royal Logistics Corps Regiments (Close and General Support)		6		
Airborne Early Warning Aircraft		6		
Air Defence Aircraft		42		2 (6)
Maritime and Reconnaissance Aircraft		11	4	8
Offensive Air Support Aircraft		92		
RAF Regiment Squadrons (Field and Rapier)		10		
Support Helicopters		52.25		
Transport and Tanker Aircraft		82		

(1) Second helicopter carrier could be provided by Aircraft Carrier in helicopter carrier role.

(2) Includes one for strategic intelligence.

(3) Committed vessels are NATO Standing Forces. These vessels would be included within the deployed force at Full Scale.

(4) Deployed force at Full Scale.

(5) Counted as part of deployed force.

(6) Same aircraft as for MT 8 Integrity of UK Airspace.



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

**Table 8:
CONCURRENCY: TWO CONCURRENT MEDIUM SCALE**

Force Element	Enduring Non-Warfighting	One-Shot Warfighting	Continuing Commitments	Factors	Total
Aircraft Carriers	1	1			2 (1)
Amphibious Ships	6 (2)	8 (2)			8 (2)
Attack Submarines	1	4 (3)	2	3.36	10
Destroyers and Frigates	4	9	1	18.13	32
Minewarfare Vessels	4	6	5	3.24	18
RM Commando	1 (2)	3 (2)	0.5	1	3.5 (2)
Royal Fleet Auxiliary Vessels	5	8	1	1.26	15
Strategic Deterrent Submarines			4		4
Armrd & Recce Regiments	1.66	2.66		4	8.33
Army Air Corps Regiments	0.33	(3)	1	0.33	4.66
Artillery Regiments	1	2.33		4	7.33
Engineer Regiments	1.44	3.33	1.66	5.10	11.53

Equipment Support Battalions (REME)	1.2	2	1	2.8	7
Field Hospital	0.5	1		1	2.5
Infantry Battalions	3	3	15 (4)	34 (4)	55 (4)
NBC Regiment		0.55			0.55
Royal Logistics Corps Regiments (Close and General Support)	1	1	1	3	6
Airborne Early Warning Aircraft	2	3			5
Air Defence Aircraft	14	17	6	33	70 (5)
Maritime and Reconnaissance Aircraft	5	5	4	8	22
Offensive Air Support Aircraft	24	42		88	154
RAF Regiment Squadrons (Field and Rapier)	1	7	3	2	13
Support Helicopters	20.5	26.5	7.5	9.75	64.25
Transport and Tanker Aircraft	51 (6)	82 (6)			82

(1) Currently a third Aircraft Carrier is required to maintain two available for operations.

(2) Only one amphibious operation at any one time is planned, therefore no Medium Scale concurrency is assumed.

(3) Includes one for strategic intelligence.

(4) This reflects the number of infantry tasks in Northern Ireland. However, as explained above, units from other arms are available to fill some of these tasks, thus reducing the requirement for infantry battalions to 40.

(5) Would require the use of operational conversion unit aircraft.

(6) It is assumed that the deployment timings of two concurrent Medium Scale deployments will be staggered meaning that concurrency requirements for transport aircraft at Medium Scale will not arise.



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

**Table 9:
Concurrency: Full Scale**

Force Element	Full Scale	Continuing Commitments	Factors	Total
Aircraft Carriers	2			2 (1)
Amphibious Ships	9 (2)			9 (2)
Attack Submarines	4 (3)	3	3.36	10
Destroyers and Frigates	26	3	0.27	29
Minewarfare Vessels	17	4	1.08	22
RM Commando	3	0.5		3.5
Royal Fleet Auxiliary Vessels	12	1	0.09	13
Strategic Deterrent Submarines		4		4
Armrd & Recce Regiments	10			10
Army Air Corps Regiments	4	1		5
Artillery Regiments	13		2	15
Engineer Regiments	9.66	1.33	2	13
Equipment Support Battalions (REME)	6	1		7
Field Hospital	3			3

Infantry Battalions	29	8	3	40
NBC Regiment	1			1
Royal Logistics Corps Regiments (Close and General Support)	6	1		7
Airborne Early Warning Aircraft	6			6
Air Defence Aircraft	42	2	43	87 (4)
Maritime and Reconnaissance Aircraft	11	12		23
Offensive Air Support Aircraft	92		92	184 (4)
RAF Regiment Squadrons (Field and Rapier)	10	1		11
Support Helicopters	52.25	4.5		56.75
Transport and Tanker Aircraft	82			82

(1) Currently a third Aircraft Carrier is required to maintain two available for operations.

(2) Second helicopter carrier could be provided by Aircraft Carrier in helicopter carrier role.

(3) Includes one for strategic intelligence.

(4) Would require the use of operational conversion unit aircraft.



STRATEGIC DEFENCE REVIEW

SUPPORTING ESSAY SIX, ANNEX B

Table 10:
Force Levels

Force Element	Previously Planned Force Level	Planned Force Level Post-SDR	Difference
Aircraft Carriers	3	3 (1)	(1)
Amphibious Ships	8	8	
Attack Submarines	12	10 (2)	-2
Destroyers and Frigates	35	32	-3
Minewarfare Vessels	25 (3)	22 (3)	-3
RM Commando	3.5	3.5	
Royal Fleet Auxiliary Vessels	15	15	
Strategic Deterrent Submarines	4	4	
Armrd & Recce Regiments	11	10	-1
Army Air Corps Regiments	5	5	
Artillery Regiments	15	15	
Engineer Regiments	11	13	+2
Equipment Support Battalions (REME)	6	7	+1
Field Hospital	3	3	

Infantry Battalions	40	40	
NBC Regiment	(4)	1	+1
Royal Logistics Corps Regiments (Close and General Support)	8	7	-1
Airborne Early Warning Aircraft	6	6	
Air Defence Aircraft	100	87	-13
Maritime and Reconnaissance Aircraft	23 (5)	23 (5)	
Offensive Air Support Aircraft	177	154	-23
RAF Regiment Squadrons (Field and Rapier)	14	13	-1
Support Helicopters	63 (6)	63 (6)	
Transport and Tanker Aircraft	78	82	+4

(1) We plan to replace the INVINCIBLE Class with two larger vessels in the longer term.

(2) Staged reduction from initial force of 12.

(3) Force level is currently 19.

(4) NBC Regiment was planned to be provided by the Territorial Army.

(5) Force level when Nimrod MRA4 replaces Nimrod MR2.

(6) Chinook-equivalents: actual number of Support Helicopters planned is 116.



SUPPORTING ESSAY SEVEN

RESERVE FORCES

1. Britain relies heavily on the contribution made by Reserves to our Armed Forces. Reservists serve alongside their Regular colleagues in operations, and they are integral to our ability to expand our forces in times of crisis. They are a very cost-effective way of adding to our military capabilities. One of the clearest findings of the Defence Review has been that we could not fight a war at any significant level without them.
2. There are several kinds of Reservist. The two largest groups are the Regular Reserves: former members of the regular Armed Forces who are still liable for service in an emergency; and the part time Volunteer Reserves, who are recruited directly from the civilian community - the Royal Naval Reserve, the Royal Marines Reserve, the Territorial Army and the Royal Auxiliary Air Force. However, the Reserve Forces Act 1996 also provides for the wider use of Reserves, such as those wishing to serve full time with the Regular Forces for a limited period, and "sponsored" Reserves: contractors' staff who have agreed to be mobilised when required, to continue their work in operations alongside the Service personnel who depend upon them. These newer forms of reserve service may well become more important in future.
3. The Volunteer Reserves are more widely distributed across the country than the Regular Forces. In most areas, it is therefore Volunteer Reserves who provide the most visible Armed Forces presence. They help to inform society about what the Armed Forces do and of their importance to the nation, and provide a means by which the community as a whole can contribute to our national security interests. The role of cadet forces also establishes a vital link with young people, fostering good relations and helping recruitment.
4. Our aim in the SDR has been to ensure that the roles given to Reserve Forces are relevant to the international situations in which our Armed Forces might operate in the future. We need to ensure that the Reserves are usable, and that in common with the rest of the Armed Forces they have the right training, the right equipment, and the right support to play their part. We also need to ensure that the administration and support of the Reserve Forces is efficient and effective, and that the link between Reserves and Regular Forces at all levels is strong and clear.

5. We have concluded that it is right for Britain to continue to remain dependent on our Reserve forces. But these Reserve forces, which have hitherto largely been held for a struggle for national survival, should be restructured to undertake new challenges and the new style of operations that may be launched in the future.

The Cold War and its aftermath

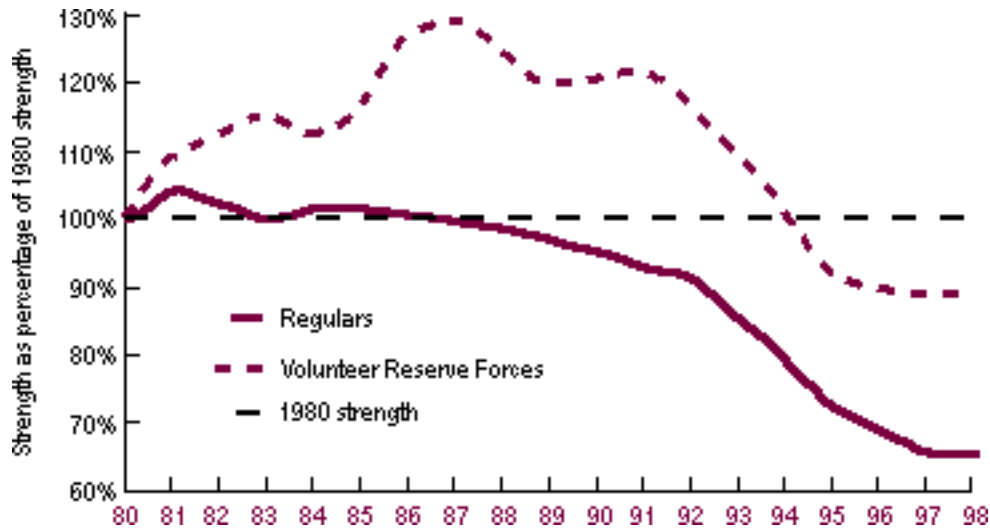
6. The size and shape of our Reserve Forces is governed by the risks that we face. During the Cold War, our forces were organised to defend against a strategic attack on Western Europe. We were required to maintain a large Reserve so as to regenerate our forces on the continent in the face of such aggression, and to defend the United Kingdom against direct attack. The size of our Armed Forces, both Regular and Reserve, grew over the last decade of the Cold War, and the Reserves expanded significantly faster than our Regular Forces.

7. With the welcome end of the Cold War, there has been a period of adjustment in all three Services:

a. the Royal Naval Reserve reduced in size by 1994 to less than half of its Cold War establishment, and changed role from focusing on mine countermeasures (with dedicated vessels) and defence of the UK base to a wider role in support of the Fleet. However, its utility has been limited by relatively low levels of funding for training activity. Royal Marines Reserve authorised strength fell from 1,580 to 1,000 in the same period;

b. the Territorial Army has been restructured twice, falling in strength from 74,000 in 1989 to around 56,000 in 1998. An increasing proportion of the Territorial Army is involved in vital supporting roles, rather than combat ones. But large numbers of Reservists in the Territorial Army are still dedicated to Military Home Defence, such as the guarding of key points throughout Britain or forming a reconnaissance screen against an invading force;

c. the Royal Auxiliary Air Force had also reduced in size by 1994 to less than two-thirds of its Cold War establishment.



NOTE:

Volunteer Reserve Forces include Home Service Force and Non-Regular Permanent Staff.

Strategic Defence Review

The Requirement

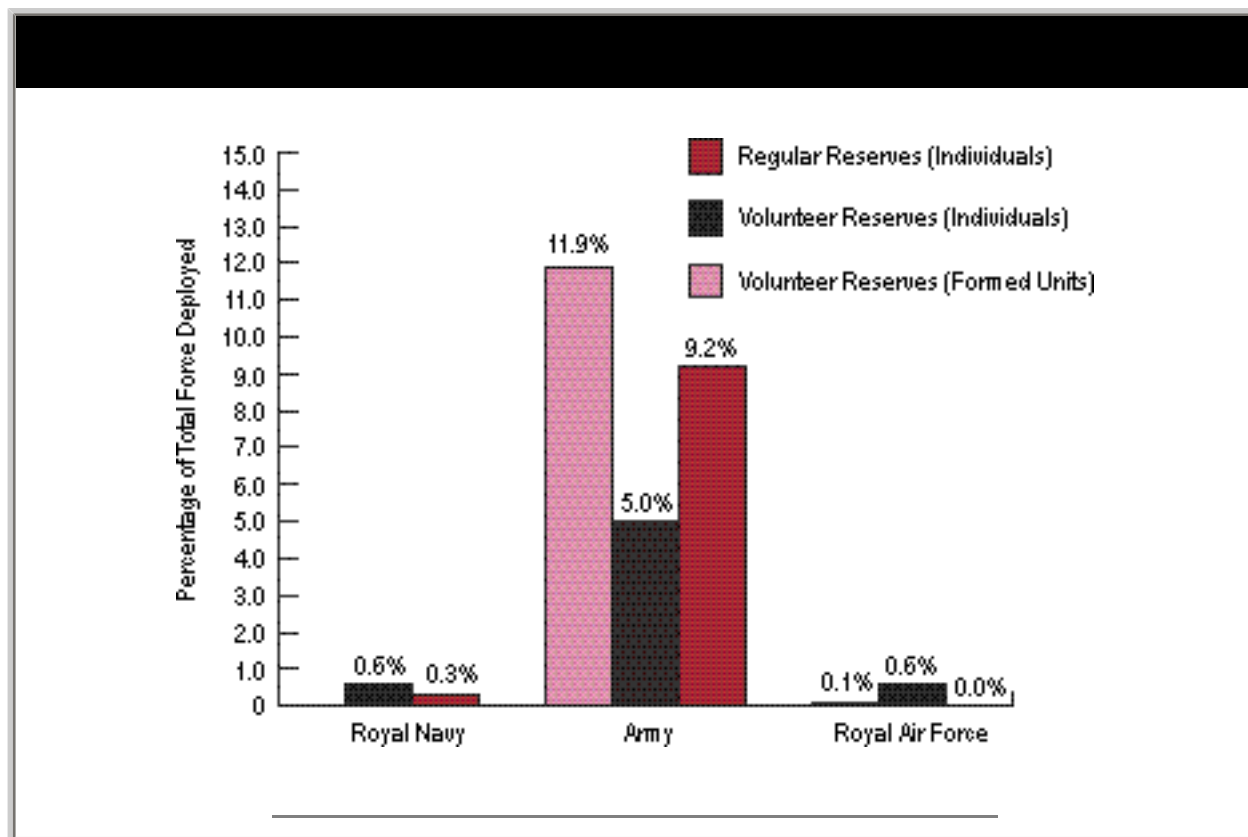
8. The key element of the changed strategic situation is that there is no longer any immediate threat of a major conventional attack on Britain or on our NATO allies; nor could such a threat re-emerge without warning and preparation time of some years. On the other hand, the likelihood of short notice, smaller-scale conflicts around the world has increased. Taken together, this means that the forces we have available to deploy can be smaller than before, but they will have to be more flexible and more ready to deploy at very short notice. They will also have to be able to sustain operations for extended periods.

The Future Reserve Role

9. Against this background we have concluded that the main contribution of Reserves should switch from being insurance against a struggle for national survival to supporting Regular Forces' deployments abroad, both with individuals and with formed units.

10. Certain individuals in the Reserves will need to be ready to reinforce Regular units with their special skills, wherever required. They will therefore need to be held at similar -

sometimes very short notice - readiness to their Regular colleagues. Many of these individuals will be drawn from the Regular Reserves, but some will be from the Volunteer Reserves.



11. In general, Reserve Units would require a period of warning and preparation before they could deploy. But we believe that they could also be ready, in time, to perform a wide range of specialist supporting tasks for large and very demanding operations (such as the Gulf War of 1990/1): these, too, may occur at relatively short notice. All this means that we will need Reserves that can be fully integrated into Regular formations and able to work with high levels of skill in situations that may be very demanding.

12. We also consider that Reserves should be able to serve in long running peace support operations, of the kind now taking place in Cyprus or Bosnia, that have become part of the Armed Forces' day to day work. These types of operations have increased in number over the past decade and we have benefited greatly from the willingness of several thousand Volunteer and Regular Reservists to support current operations and valued their commitment and skills.

13. There is another factor we need to bear in mind: the scope for Reservists, many of whom are in civilian employment, to provide continuous support to the Regular Forces is understandably limited; this means that, unsurprisingly, the overwhelming majority of the burden of these commitments must continue to fall on the Regular Forces.

14. In all of the roles described above, the requirement for Reserves is likely to remain broadly steady or to increase. But given the disappearance of a direct threat, there will not be the same

requirement for large numbers of the Territorial Army committed to Military Home Defence. There are also a few cases where roles currently performed by Volunteer Reserve units are likely to be required at such short notice that we must now plan for their tasks to be fulfilled by regulars.

The Size of Volunteer Reserve Forces

15. To respond to these new circumstances we are proposing the following changes:

The Royal Naval Reserve

16. The Royal Naval Reserve ceiling will increase by 10% from 3,500 to 3,850 to provide an expanded pool of personnel available for use across the Fleet. These trained personnel will be available for augmenting the Royal Navy. No changes are planned to the strengths or roles of the Royal Marines Reserve.

The Territorial Army

17. There needs to be substantial change to the composition and structure of the Territorial Army, especially to reflect the clear requirement to provide highly trained and properly resourced forces to support the Regular Army while reducing the effort devoted to the old Military Home Defence task. The following are the key changes proposed:

- a. we shall need more medical Reserves, as part of our overall aim of increasing medical support to the Armed Forces generally;
- b. we shall continue to require Reserves in a wide range of arms to support the Regular Army on operations;
- c. we shall need fewer light infantry battalions and Royal Armoured Corps (also known as "Yeomanry") regiments. We also plan to reduce the number of engineer and transport regiments, some of which currently exist to support a rather larger force than we are now likely to deploy.

These changes will produce a Territorial Army of about 40,000 volunteers. This is smaller than the present structure, but differs in that it is specifically constructed to meet our current and foreseeable future requirements. Most importantly, the Territorial Army will have a meaningful and clearly defined function - and one which the nation will need to rely on if our Armed Forces are to perform their tasks as effectively in the future as they have in the past. Work on the detailed design, structure and composition of the Territorial Army will be carried forward during the autumn.

The Reserve Air Forces

18. Following the reductions in 1994, the Reserve Air Forces had already begun to be reconfigured and this was under way before the Strategic Defence Review was undertaken. Among other things, the RAF is committed to the employment of Reservist aircrew in support of the front line, and a significant number have already taken part in Air Transport operations. The Review has also identified the need for an additional 270 posts within the Reserve Air Forces in other supporting roles.

Readiness

19. Numbers of Reserves and the roles they undertake are important. But the key to the future effectiveness of the Reserve Forces is readiness - being properly prepared so that units and individuals in the Reserves will be able to do the job required of them in the right timescale. Currently most of our Volunteer Reserves are at low levels of readiness; in the future some units, particularly logistic, medical and other support elements, will be placed at higher states of readiness to reflect the increased likelihood that they will be called out. Already, all Reserve aircrew and Public Relations personnel - and a significant proportion of Intelligence personnel - in the Reserve Air Forces are now High Readiness Reserves, liable to deploy on operations within days.

Call-out Arrangements

20. Reserves in the future will be there to be used, with clearly defined and important roles. If they are to be used properly we must be able to deliver the Reserves to where we need them in the right timescale. This means that there must be better arrangements for call-out. In other words, such is the importance of Reserves that we must be able to have great assurance as to their availability. We believe that improvements to our existing procedures are necessary in these new circumstances. In the Territorial Army, for those who volunteer for service in operations, we will invest much more effort in mobilisation, so as to ensure that there is a smooth process that will deliver individual Reservists to units, capable of making an immediate contribution. To this end we are establishing an Army Mobilisation Centre and new management measures to improve the quality of service and training to Reservists on call-out, on operations, and on return to civilian life.

21. In some circumstances, however, it will not be possible to rely upon Reservists volunteering. In mounting any major operation we will need to guarantee the availability of key capabilities provided by the Reserves, whether these are in battalions, sub-units, or the skills of a particular individual, and we will need to do so within a short period of time. Although many individual Reservists may be willing to volunteer for service, for a range of reasons some will not, and it is unlikely to be enough to rely on this willingness alone; nor would it be fair on

Reservists or on their comrades.

22. If we are to use our Reserve Forces to their maximum effect on any sizeable operation, we must therefore be prepared to mobilise them compulsorily. Selective compulsory call-out is therefore envisaged for situations well short of a direct threat to the United Kingdom - for example, for deployments on a similar scale to the Gulf War.

The Reserves Commitment

23. Planning for our Reserves to take part in force projection operations underlines our seriousness about the use of Reserves, and their importance. In turn it demands from those in the Reserves a commitment to the possibility of active service. Membership of the Reserve Forces implies taking a share in the responsibility for the fulfilment of our defence and foreign policy objectives. All Reservists must be available and expect to be mobilised under the 1996 Reserve Forces Act. We will be emphasising to our volunteers the seriousness of their responsibilities in this regard.

Employers

24. For our part, we recognise that this will make demands on those who employ Reservists as well as on the volunteers themselves. The appeal and financial payment provisions of the Reserve Forces Act 1996 will help us to address such concerns. We will seek, in a continuing dialogue with civilian employers, to reinforce support for the Reserves and to encourage it at all levels in the community. We will depend heavily upon the excellent work of National and other Employer Liaison Committees, and the Territorial, Auxiliary and Volunteer Reserve Associations (TAVRAs). We have been encouraged, in the course of the Review, by the many expressions of support received from employers for the Reserve Forces, and recognition they show of the benefits that staff with Reserve experience bring to any organisation.

Resources

25. Since such clear and crucial roles for the Reserves have been identified in the Review, we recognise that it is vital that Reserves are resourced to carry them out. Sufficient funds must be made available to ensure that all Reserve units are properly manned and trained to meet the tasks required of them, and are capable of using new equipment with familiarity and confidence in an operational situation. We are determined to provide the resources necessary. In particular, new equipment will be introduced as part of our continuing programme of improving the capability of our Armed Forces; and training days will be provided at a level sufficient to guarantee operational effectiveness and to make service in the Reserves a challenging and enriching experience.

26. We therefore intend that training for the Royal Naval Reserve and the Royal Marines Reserve will increase, in the case of the Royal Naval Reserve by 40% and for Royal Marines Reserve recruits by 66%. Territorial Army members volunteering for service with Regular Forces will have two weeks focused training immediately following mobilisation. And we intend that in the future the resourcing of our Reserves will continue to get the attention it deserves.

Local Links

27. As well as providing the opportunity to contribute to the effectiveness of the Armed Forces, service in the Reserves has wider social and representational benefits, in that it offers the opportunity to people from all walks of life and in all areas to make a contribution to the national good. Such links benefit both sides. Volunteers bring back technical and management skills to industry, improved citizenship to society, and assist in regional support in many ways, including recent military aid to flooded areas.

28. The Reserves provide important support to the cadets. The cadet forces are significant national volunteer youth movements. We aim to plan the changes to the Reserve Forces in such a way as to minimise any disruption to the cadets. In addition, we intend there to be modest increases in resources devoted to cadets from the defence budget.

29. All this will make implementing the changes to the Reserves, and to the Territorial Army in particular, a very complex process. It may not be until some months after our initial announcements that we will be able to make clear how each Territorial Army unit and training centre may be affected. However, the principles we will apply in restructuring the Territorial Army will take local issues very much into account. We will want to protect, so far as possible, existing strong links with the community, and with the cadet forces. We will want to build upon the enthusiasm there is in many areas for volunteer service. We will also want to take into account matters such as the availability of training facilities, and the need for close working between Territorial Army units and the Regular Armed Forces. Within these constraints, we aim to preserve as wide a presence of the Territorial Army throughout the country as possible.

Administration and Career Management

30. We have taken the opportunity to consider our arrangements for the day-to-day running of our Reserve Forces. It is important that Reserve Forces should be backed up by a policy-making and administrative structure which is efficient, which ensures that the linkage between Reserve Forces and the Regular Forces alongside whom they will serve in battle is properly managed, and which at the same time recognises the special circumstances relating to service in the Reserves.

31. Support to Reserves is therefore to be enhanced by a dedicated manning and careers

branch for the Territorial Army, which has now opened at the Army Personnel Centre in Glasgow. Similar functions are already conducted in the much smaller Reserves of the other Services. A clearly defined structure for high-level policy direction for the Territorial Army is now in place, and work on a range of initiatives is under way. This will ensure that issues relating to the Territorial Army are given sufficient prominence at the very heart of the Army's policy-making processes, that the new focus for the Territorial Army set out in the Review will be driven through successfully, and that the full resources of the Ministry of Defence are placed behind Reservists.

The TAVRAs

32. At local level administration and support of the major elements of the Reserve Forces will continue to be carried out through the TAVRAs, working within the context described in the 1996 Reserve Forces Act. This is a tri-Service role which has been carried out by the TAVRAs and their predecessor organisations for many years. It is an unusual arrangement, but has been found to be a successful one. The TAVRA system ensures that people from the local communities in which the Reserve Forces and cadets are based are involved in the running of Reserve and cadet units. It also provides Reserve Forces and cadets representatives with the right of direct access to Ministers, so that they can make representation about Reserves issues. This provides an important balance and ensures that the case for the Reserves is clearly articulated at a high level.

33. TAVRAs have a second role as administrators and suppliers of services to the Reserve and cadet forces organisations. All this will remain unchanged. However, to reflect the increasing operational integration of Army Reserve and Regular forces, there will be certain changes in the way in which TAVRAs are organised (they were last restructured in 1968). It is important that regional commanders take on full responsibility for the operational standards of Army Reserve units in their area; as a result, TAVRA boundaries will be altered and brought more in line with the Army's Regular command structure. The new arrangement will take account of the needs of the other Services' Reserve Forces and all the cadet organisations. There are areas of activity, such as property management and recruiting, where the Royal Naval Reserve and Royal Marines Reserve will rely more heavily on the assistance of the TAVRAs, where this is seen to be beneficial and cost-effective.

Conclusion

34. We need the Reserves: they have a proud history and we fully intend that they will have a secure and relevant future. We need the commitment of tens of thousands of individuals to train for and take part in military operations in support of our legitimate national interests and foreign policy objectives. There is great flexibility in the Reserves, both in the type of service and in the wide range of roles a Reservist may fill. There are many ways that Reservists can

and will make their contribution in future. Without them we will not be able to do much that our Armed Forces might be called on to do.

35. The Strategic Defence Review has given us the opportunity to restructure our Reserve Forces in a coherent and enduring way. It has confirmed the need for them to continue to perform some existing roles and to take on new and demanding ones. But it has also shown where some Cold War tasks are no longer relevant. We consider that the size and shape of the Reserve Forces emerging from the Review will be sufficient to meet any plausible operational eventuality.

36. There will, in particular, be changes to many Army regiments that have long and honourable histories. This, we recognise, will be hard for many involved. But the resulting forces will be capable and usable - better fitted and able to work in support of Regular Forces on all types of operations. With the commitment of individual Reservists and their employers, the right training, support and equipment and new management arrangements, our Reserve Forces will be more important, more relevant, and will provide their volunteers with opportunities to continue serving the country in ways that are both meaningful and necessary.



SUPPORTING ESSAY EIGHT

JOINT OPERATIONS

1. In joint operations, the forces provided by two or more Services are integrated to maximise their combined military effectiveness. Using military capabilities jointly is fundamental to modern warfare. The extension and encouragement of our ability to conduct joint operations successfully has therefore been at the heart of the Strategic Defence Review, and the principles have been set out in a Joint Vision Statement.

JOINT VISION STATEMENT

- **Success in modern warfare depends on joint teamwork. Battles and wars are won by maritime, ground and air forces operating effectively together in support of shared military objectives.**
- **Joint operations are not new and Britain's Armed Forces have a proud record of successful co-operation. In the modern world, where we will face complex and unexpected situations which require a swift and flexible response, the importance of a joint approach is more critical than ever.**
- **Individual units depend for their fighting capability on the training, discipline and ethos generated by their parent Service. But success for the force as a whole requires effective orchestration of its individual components.**
- **To achieve this, a single joint commander is needed, supported by a unified command structure. The joint commander must be able to draw upon and direct the entire range of front-line forces committed to the operation, together with supporting units and personnel (both military and civilian).**

– Joint teamwork does not just happen. It requires a shared understanding of the roles each participant is required to play. It also needs mutual confidence, built up from extensive practical experience of operating together, that everyone will deliver his or her contribution effectively.

– We must therefore ensure that a joint approach forms a central part of the way defence activity is carried out. This means closer integration in day-to-day training, in operations, and in the way defence is organised, supported and managed at all levels.

– The future of Britain's defence is in joint operations. We must therefore create an integrated framework which, while capitalising on single-Service professionalism, will be increasingly and necessarily joint.

2. The Joint Vision will help to shape the future organisation and operations of the Armed Forces. It will guide developments in strategy, doctrine, technology and force structure. This essay describes the basis from which the joint or integrated concept will be developed, and the specific measures forming part of the Review.

The Starting Point - A Joint Inheritance

3. Because of our geography, joint operations have always been fundamental to British military success. Much of our planning for the Cold War was undertaken on a joint basis, and this stood us in good stead in the Falklands, the Gulf and Bosnia. But the requirement is changing all the time. What was adequate during the Cold War is inadequate in today's very different circumstances. The traditional distinction between ground, sea and air theatres of operations is rapidly being replaced by a single battlespace, embracing all three environments and cyberspace, and encompassing functions as diverse as joint logistics, information warfare and media operations. Britain's Armed Forces have an unparalleled tradition of joint co-operation, on which we now intend to build to produce truly integrated forces for the next century.

4. The post-Cold War process of increasing joint co-operation and integration between the Services started during the mid-1990s:

– a Permanent Joint Headquarters has been established at Northwood. It now plans and executes all joint operations, including Bosnia and recent deployments

to the Gulf;

– a Joint Rapid Deployment Force was set up to provide a national quick response capability;

– the Joint Services Command and Staff Course at Bracknell has started to train future commanders in a completely joint environment;

– a start has been made in expanding integration in the support area, including joint flying training establishments at Barkston Heath and Shawbury; and joint fixed- and rotary-wing aircraft repair organisations run by the Royal Air Force and Royal Navy respectively; and

– we have deployed forces on operations in fully joint packages, such as the mixed Navy and Royal Air Force air wings serving aboard the aircraft carrier sent to the Gulf earlier this year.

The Way Ahead - The Strategic Defence Review

5. Although these initiatives are helping to foster a culture of joint operations, the changes have not yet gone far enough. The Strategic Defence Review will therefore carry the joint approach to defence forward where it makes sense to do so in the front-line, the command structure and the support area.

6. There will, however, be no merger of the Services. Our judgement and experience elsewhere is that this would reduce, not increase, their overall effectiveness. Within a joint framework, the individual Services have distinct roles and professional skills. This has been reflected throughout the SDR work, which has been based firmly on practicalities rather than dogma, taking account of the lessons learnt on operations and the views of our own personnel.

Joint Rapid Reaction Forces

7. Today's unpredictable strategic environment is placing new demands on the Armed Forces. If they are to play an effective role in supporting Britain's foreign and security policy objectives, their ability to conduct a wide range of military activities, over long distances and often at short notice, will be paramount. We concluded early in the Review that we needed broadly the same kind of forces to meet contingencies arising from our vital stake in European security, our very important interests in the surrounding regions, and our wider national and international responsibilities elsewhere. We also concluded that these forces must be flexible, high

capability, mobile and responsive, with the training, motivation and equipment to be successful in demanding conventional warfare and complex peace support operations.

8. Such forces must be able to send a powerful message of our willingness to act should diplomacy fail. As United Nations Secretary General Kofi Annan said recently: ". . . you can do a lot more [with diplomacy] when it is backed up by firmness and force".

9. The creation of hard-hitting, flexible and genuinely deployable forces, able to undertake the full spectrum of short- notice missions in today's international environment, became a central theme of the Review. And our analysis made it clear that to be effective, these forces must be joint.

10. The Joint Rapid Deployment Force was an important step in the right direction. It brought together capabilities drawn from all three Services into a joint structure for short notice operations in which NATO was not involved. These capabilities included light ground forces (the Commando and airborne brigades), heavier ground forces at battalion level, and a range of maritime and air forces. Creating a pool of readily available forces from all three Services was clearly right. It has also provided a good focus for developing our joint operational expertise.

11. But experience has revealed some major flaws in the concept:

- the Force, especially its ground component, lacked the self-protection, tactical mobility and firepower needed for more intense combat operations. And its reinforcement would have been a long time coming because of our limited strategic transport capabilities;

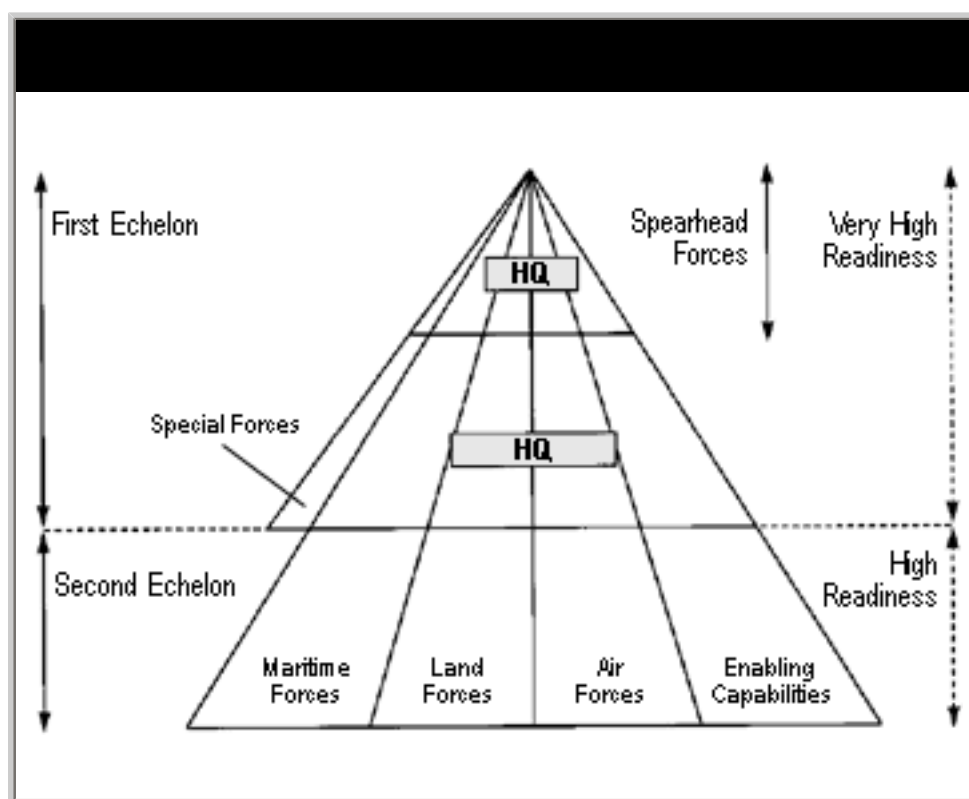
- the Force was a one-shot weapon. It had only a single logistic and medical support chain so that it could conduct only one operation at a time. In the post Cold War world, we cannot expect to be able to meet our commitments and responsibilities consecutively rather than concurrently. One of the consequences has been a reluctance to use the Joint Rapid Deployment Force in some crises because, once committed, our ability to respond quickly elsewhere would be constrained;

- the force did not have genuinely joint deployable headquarters; and

- the force as such did not have a NATO role, which risked creating unhelpful distinctions between different types of operation and giving the incorrect impression to our Allies that we were beginning to re-nationalise our defence policy.

12. The Strategic Defence Review has acknowledged the strengths of the Joint Rapid Deployment Force and sought to build on them. Our aim has been more capable, better supported joint forces with the strategic transport to make them truly deployable.

13. The solution we have adopted is a pool of Joint Rapid Reaction Forces, bringing together all readily available forces from all three Services, including a range of enhanced capabilities to address the deficiencies described earlier. From this pool we can draw the right force packages to mount short-notice medium-scale (i.e. brigade size or equivalent) operations of all kinds across the crisis spectrum and under NATO, Western European Union, UN coalition or national auspices. We will be able to mount concurrent operations if necessary, or use the pool of forces to make a coherent and balanced early contribution to larger operations, subsequently building up our commitment over time using forces held at lower readiness levels. The concept is set out diagrammatically in *FIGURE 1* below.



14. To be effective, the Joint Rapid Reaction Forces concept requires a significant increase in the size of our pool of readily available joint forces, including front line, command, support and transport capabilities. Among the key additions will be the airmobile brigade (and, in due course, its successor air manoeuvre brigade); an armoured and a mechanised brigade; much larger and more capable maritime and air elements; special forces; a dedicated joint task force headquarters, properly manned, equipped and trained, together with the nucleus of a second such headquarters for concurrent operations; logistic, medical and other support to mount two concurrent operations; heavy lift aircraft and four further roll-on/roll-off container ships. As a result, instead of being limited to deploying a light brigade, reinforced by a battalion of heavier troops, we will for example be able to send a commando brigade to take part in a peace

support operation and an armoured brigade to contribute to a warfighting mission elsewhere. Or vice versa, depending on the circumstances.

15. The Joint Rapid Reaction Forces will be ready to deploy in two echelons, supported by a range of enabling capabilities. The planned composition of these forces is set out in the following boxes.

ENABLING CAPABILITIES

Whatever the size of force package deployed, several key 'enabling capabilities' will be required. These include:

- command and control (including a deployable joint task force headquarters), joint communications and information systems, intelligence support, and administrative support;**
- joint logistics support, including deployed medical support; and**
- strategic transport - usually provided by MOD-controlled transport assets for first echelon forces, and by a combination of MOD and commercially contracted strategic transport assets for follow-on forces.**

THE FIRST ECHELON

First echelon forces will be available at very high readiness. The most readily available elements of the first echelon will be 'Spearhead Forces'. The pool will include:

- Special Forces;**
- an attack submarine, surface warships and a support ship;**

– a spearhead battlegroup based on a light infantry battalion or commando group, drawn from 3 Commando Brigade, 3(UK) Mechanised Division's 'ready brigade' or 24 Airmobile Brigade; and

– a mix of offensive and defensive combat aircraft, reconnaissance aircraft, helicopters, short-range air defence units and supporting tactical air transport and air-to-air refuelling aircraft.

The balance of first echelon forces could be drawn from:

– additional Special Forces;

– shipping to generate a maritime task group centred on an aircraft carrier or helicopter assault ship, and including amphibious shipping if necessary to support the lead Commando battlegroup;

– lead battlegroups, to provide a broad choice of capabilities, including:

*** a lead Commando battlegroup equipped with Lynx anti-tank helicopters (Longbow Apache when in service), support helicopters and all-terrain vehicles;**

*** a lead parachute battlegroup, based on a parachute battalion;**

*** a lead aviation/armoured reconnaissance battlegroup, with Lynx anti-tank helicopters (Longbow Apache when in service), armoured reconnaissance and infantry sub-units;**

*** a lead armoured battlegroup with Challenger tanks and Warrior armoured infantry vehicles;**

and

*** combat support and logistic support groups with artillery, air defence, engineer and other assets;**

– a range of high capability air assets, including additional offensive and defensive combat aircraft, helicopters and support aircraft.

THE SECOND ECHELON

The second echelon of forces will be available at high readiness to provide more substantial capabilities should the first echelon require strengthening or to conduct subsequent operations. These forces would probably use a combination of MOD and commercially contracted transport assets to deploy. The pool would comprise:

– additional maritime forces to form a second or larger, more capable maritime task group, including an amphibious capability if necessary to support 3 Commando Brigade;

– a choice of ground force brigades drawn from:

*** 3 Commando Brigade, including specialist capabilities for amphibious, mountain and cold weather operations;**

*** a mechanised 'ready brigade' from 3 (UK) Mechanised Division;**

*** an armoured 'ready brigade' from 1 (UK) Armoured Division; and**

*** 24 Airmobile Brigade, providing an aviation, parachuting or tactical air-**

landed capability;

– substantial additional air assets to enable operations across the full spectrum of airpower roles to provide a robust air contribution to the Joint Task Force.

16. The pool of forces available for the Joint Rapid Reaction Forces will vary from time-to-time but its approximate size and shape will include:

- around 20 major warships (aircraft carriers, attack submarines, amphibious ships, destroyers or frigates);
- about 22 other vessels (mine warfare and support ships);
- four ground force brigades;
- about 110 combat aircraft;
- over 160 other aircraft.

17. Setting up the Joint Rapid Reaction Forces is a major undertaking, but we believe that this initiative is right for defence and that the logic underpinning it will command widespread agreement. Taken together, the measures we propose will provide Britain with a step-change in our ability to undertake short-notice force projection operations.

18. It will take time to put all of the capabilities in place. We are, however, giving priority to this aspect of implementation of the Strategic Defence Review, and our aim is for the Joint Rapid Reaction Forces to be operational in 2001.

Chief of Joint Operations

19. In parallel, we are pressing forward with the move to greater joint co-operation and integration in a number of other key areas. The substantial expansion in both the number and types of forces assigned to our Joint Rapid Reaction Forces, and hence the increasing number of operations likely to come under the command of the Permanent Joint Headquarters, has led us to reassess the role of the Chief of Joint Operations.

20. As explained in our Joint Vision, his role is crucial to operational success. And units operate more effectively if they have exercised regularly as a joint force and if they are familiar

with the commanders, headquarters and joint procedures under which they will work on operations. To ensure that the contingency plans and joint procedures are effective in a wide range of potential scenarios, there is a need regularly to bring together key Joint Rapid Reaction Force commanders and their personnel.

21. We will therefore increase the responsibilities of the Chief of Joint Operations. He will have increased authority for enhancing the training and preparedness of the Joint Rapid Reaction Forces. A new two-star post, the Chief of Joint Force Operations and Training, will be established to assist him in these tasks. The Chief of Joint Operations will also have a much greater voice in stating joint warfare requirements. And he will be responsible for a top level budget, placing him on a similar budgetary footing to the single Service Commanders in Chief.

Joint Force 2000

22. The operational potential of a joint carrier air wing was graphically shown earlier this year in the Gulf, when the deployment of Royal Air Force Harrier GR7s alongside the Royal Navy Sea Harriers on HMS INVINCIBLE made an important contribution to the multinational force applying pressure on Iraq to comply with UN resolutions.

23. Total integration of current Harrier aircraft into a single force is impracticable. The two Harrier variants share only around 10% of their airframe and avionics, and they have quite different primary operational roles. But closer harmonization between the existing Harrier forces could pave the way towards a truly joint force for the future. Capitalising on the success of current joint Harrier operations, we propose to develop a Joint Force 2000, which could eventually involve the replacement of all Harriers with a common aircraft type.

24. There are several options for the new aircraft (which would be capable of operating from ashore and afloat). For the Joint Force 2000 concept to work successfully, we will need a common aircraft, common operating procedures, common maintenance practice and a common support organisation. Further study will begin shortly to determine the best way to realise the potential which the concept offers to provide a flexible and deployable joint force, able to operate either from land bases or aircraft carriers.

Joint Defence Centre

25. The importance of joint operations has highlighted the need for greater cohesion and better co-ordination in the development of joint doctrine. Such doctrine provides guidance for the planning and conduct of joint operations and training at all levels.

26. We will therefore set up a Joint Defence Centre to develop high-level joint doctrine, co-ordinate the development of single Service doctrine, and provide the British input to Allied and multi-national doctrine. It will also support the operational role undertaken by the Permanent

Joint Headquarters. The Centre will give impetus to forward thinking, contribute to the future joint vision and strategic development of our armed forces and thus contribute directly to the cohesion and effectiveness of our forces in joint operations. Work is in hand to establish where the Centre should be situated.

Joint Helicopter Command

27. Our work has emphasised the need for joint approaches to capability areas in which more than one Service is directly involved. One of the main examples is battlefield helicopters. All three Services operate battlefield helicopters in support of forces on the ground; these include the Royal Navy's Sea Kings; the Army's Lynx and Gazelles (and Longbow Apache when in service); and the Royal Air Force fleet of Chinooks, Pumas and Wessex (and Merlin Mk3 when in service). Other helicopters are employed in anti-submarine warfare/anti-surface warfare, airborne early warning and search and rescue roles. But their roles and the equipment they use have little in common with battlefield helicopters.

28. Operational experience in Northern Ireland, Bosnia and the Gulf has demonstrated the unique contribution of battlefield helicopters throughout the conflict spectrum. Moreover, it has become evident that there are frequently too few of them available to meet the collective demands they face.

29. One option which has frequently been discussed is the transfer of all battlefield helicopters to a single Service. But, as with merger of the Services, we believe that any advantages would be outweighed by the damaging impact it would have on ethos, morale and operational effectiveness.

30. We therefore propose to form a Joint Helicopter Command, responsible for training, standards, doctrinal development and support for operations. The Command will draw on the equipment, personnel and expertise of the single Services and be charged with providing the Joint Force Commander tailored packages of battlefield helicopters (from one or more Service), support equipment and personnel, to meet operational requirements. The Command will provide a single focus for the ready transfer of best practice from Service to Service and for removing, over time, differences in current operating procedures.

31. Significant rationalisation of the engineering and supply arrangements for helicopter operations has already taken place in recent years. The Defence Helicopter Support Authority has become the tri-Service organisation for the management of all helicopter support, and its responsibility will be expanded to include the direction and tasking of the non-deployable elements of helicopter support in each Service. This will help develop a taut customer/supplier relationship with the new Joint Helicopter Command.

32. Further study is now underway to determine the best location for the new Command's

Headquarters, and its detailed responsibilities. Our assessment is that this initiative will produce small savings and that, in time, the new Command will provide the framework for much greater efficiency and operational effectiveness.

Joint Ground Based Air Defence

33. A second area where greater joint integration can produce important operational benefits is ground based air defence. Our deployed forces continue to require low level air defence cover to protect manoeuvring ground troops and key static installations such as logistic sites and air bases. Until now, both the Army and the Royal Air Force have maintained separate capabilities using different variants of the Rapier short-range air defence missile system. Each used their own operating procedures, command and control systems, maintenance support chains and training organizations. This has been operationally inflexible and wasteful.

34. In the future, Rapier training will be conducted jointly at RAF Honington and the differing variants of the system will be phased out and replaced by a common standard by 2006. This will allow a Joint Air Defence Headquarters to contribute specialist staff to the joint commander of air defence operations, and to organize training and support. These measures will ensure that joint deployments will have a properly integrated and flexible low level air defence coverage, as well as achieving greater efficiency, particularly in Rapier training and support.

Joint Nuclear, Chemical and Biological Defence

35. Joint integration can be especially effective in response to new or emerging threats. The continuing global proliferation of weapons of mass destruction and recent events in the Gulf have underlined the risks which deployed forces may face from these weapons, particularly biological and chemical, and the consequent need for an effective and deployable nuclear, biological and chemical defence capability.

36. Training is already conducted jointly at the Nuclear, Biological and Chemical Defence Centre at Winterbourne Gunner, but we shall now build on this by establishing a joint (Army and Royal Air Force) nuclear, biological and chemical defence regiment manned mainly by Regular personnel. This contrasts with the current capability, which is provided by the Territorial Army. Through this joint approach the unit will be able to provide this essential capability at the high readiness necessary to support the deployments of our Joint Rapid Reaction Forces. The pooling of expertise, together with a new joint doctrine, will allow for this capability to be flexibly deployed to protect all forces as the threat dictates.

Joint Support

37. Joint co-operation and integration can have benefits throughout defence, in the support area as well as the front line. The joint approach is increasingly at the heart of modern,

effective and efficient support. It will also help us move towards a functional, defence-wide support structure, which makes increasing sense in the modern world and will help us to free resources for other defence priorities.

38. One of the most obvious areas in which we need a joint approach is support to deployed forces. For example, in providing communications support, the Army and Royal Air Force have maintained their own units based in Britain (at RAF Digby) and Cyprus. These have been collocated but we have decided that in future they should become Joint Service Signal Units, to provide more effective support to joint operations of all kinds. This will also enable us to rationalise their organisational structure.

39. The same principle applies fundamentally to logistic support. Our current logistic support organisations were developed to support forces from a single Service, operating predominantly from secure bases with the necessary infrastructure already in place. Recent experience in the Gulf, Bosnia and operations in Africa has shown that at present we have difficulty in supporting diverse, joint operations mounted from sparsely equipped, temporary bases. In these circumstances, the Joint Commander of deployed forces must be able to exercise effective control over his supply chain, which must in turn be flexible and capable of adjusting rapidly to changing front line priorities. We are therefore putting in place a Joint Force Logistic Component Headquarters as part of a joint headquarters to co-ordinate all joint logistics support.

40. Elsewhere in the support area, there has been growing dependence on one Service providing support to the others on a joint basis. But there is much more we now need to do to ensure that the support areas can meet the changing demands of the front line.

41. Fundamental to our approach is a radical restructuring of the whole organisation of logistic support to introduce much greater joint direction and management. The three single Service logistics organisations will be brought together into a unified structure to provide logistic support to all the Services. A Chief of Defence Logistics will be appointed to take control of the existing organisations and to reconfigure them into a single integrated organisation. This will take time to achieve but its advantages should be significant. It will encourage the greater interoperability of logistics systems, develop a pan-defence business overview and spread best practice throughout the support area. It will also help extend the benefits from the Smart Procurement initiative into the logistics field.

42. Development of a properly integrated logistic structure will require other changes as well. This will be an evolutionary process which is set out in more detail in the essay on '[Support and Infrastructure](#)'. Among the first steps will be:

- formation of transitional joint Defence Explosive and Non-explosive Storage and Distribution Agencies, which will be unified to perform all storage and distribution

tasks from 2004/05;

- the formation of a Joint Defence Transport and Movements organisation to take responsibility for the movement of all personnel and materiel;
- formation of a single Defence Aircraft Repair Agency to repair and overhaul all military aircraft, both fixed-wing and helicopters;
- centralisation of the procurement and management of fuels and lubricants across defence.

43. The new joint organisation for defence logistics will strengthen our strategic logistics planning, matching logistics support more effectively to the requirements of joint operations. We will be able to implement innovative ideas throughout the support organisation more quickly and achieve closer integration of the supply network, particularly by the use of information technology. Industry will see consistent and coherent business processes in the logistics area, complementing the changes to be implemented under Smart Procurement. Modern forces need modern support. These initiatives will help provide it.

44. The measures set out above are logical and important steps in the modernisation of our Armed Forces. By building on the successful joint initiatives already taken, we will ensure that we can deliver forces in support of Britain's foreign and security policy aims which together provide a greater capability than the sum of their individual parts.

45. The realisation of the Joint Vision will be dependent on our personnel and their preparedness to think about defence in new ways. Feedback during the Review from all levels of the Services has confirmed that the need for effective tri-Service operational and support structures is recognised and welcomed where it makes sense operationally, and reflects experience and consultation rather than dogma. The changes we are introducing will reinforce the successes already achieved whilst retaining the individuality of the single Services which generate so much of the pride, loyalty and commitment of our people.



SUPPORTING ESSAY NINE

A POLICY FOR PEOPLE

INTRODUCTION

1. To have modern and effective Armed Forces, we must recruit and retain our fair share of the best people the country has to offer. The quality of our people and their readiness for the tasks entrusted to them are the true measure of our Forces' operational capability. The skills and experience we have been able to give our personnel, Service and civilian, their capacity for innovation and their morale and motivation are fundamental to Britain's defence.

2. We must therefore ensure that our personnel policies maintain our operational effectiveness and ensure that it is backed up, where necessary, by appropriate and demonstrable fighting power. Any change must be measured against this test. Our personnel policies need to match the best elsewhere to ensure that our people can give of their best.

3. Because our people and their views are so important, a key part of the Strategic Defence Review (SDR) was to supplement the normal consultation processes to enable us to know for certain just what are the issues of real concern. To this end the Defence Secretary directed that a liaison team be formed to talk directly to Service and civilian staff to discuss with them the issues raised by the SDR, and listen, first hand, to their concerns and ideas. In a programme of over eighty visits the team (which comprised a member from each of the Services and two civil servants) talked with audiences totalling some 7,000 people. Examples of what people had to say are reproduced throughout this essay including all the quotations. We are committed, through our Policy for People, to address the issues they raised.

4. Our Policy for People does not just include initiatives which have arisen out of the Review but incorporates others already in hand and those planned for the future to produce a coherent and comprehensive programme. On the Service side, we have endorsed the considerable work that was already in progress following the *Independent Review of the Armed Forces' Manpower, Career and Remuneration Structures*, (HMSO 1995) and the 1997 information document *The Armed Forces of The Future - A Personnel Strategy*, upon which we have drawn for our Policy for People.

5. Despite this we have, however, concluded that we need to do more. We are determined to have terms and conditions of service which are both relevant to the 21st century and balance the needs of the individual with those of the organisation. On the civilian side, we will continue to build on our *Personnel Policy Statement and our Civilian Personnel Management Strategy Personnel Policy Statement for Civil Servants Employed in the Ministry of Defence (September 1995)* and *Civilian Personnel Management Strategy: An Agenda for the next Two Years, (August 1997)*.

6. We must be a modern and fair employer. We have pledged ourselves to continuous improvement in all our practices. For instance, we are implementing one of the biggest and most demanding Investors in People (IiP) programmes in the Country. Achieving IiP accreditation will help us to ensure that all personnel are properly trained and developed to meet our goals and targets, and that our significant investment in development and training, some £1Bn a year, is properly targetted and evaluated.

7. We are also committed to making real progress on improving our record on equal opportunities through tackling the complex web of underlying factors which have inhibited people from various backgrounds choosing to join us in the past. We must ensure that those who join us make progress according to their talents and legitimate aspirations.

8. Our Policy for People balances the needs of the MOD and our staff and, wherever possible, responds to the legitimate concerns expressed recently during the consultation process by Service and civilian personnel, trade unions and outside commentators. Our conclusions, plans and proposals are set out below.

SERVICE PERSONNEL

Current Concerns

"If we don't look at personnel issues then the SDR will fail."

(Note: This and all other quotations are statements made to the Strategic Defence Review Liaison Team. In order to preserve confidentiality they have not been attributed to individuals).

9. ***Overstretch and Undermanning.*** We know there are problems. Two of the most intractable, overstretch and undermanning, have existed for years and are themselves manifestations of deeper problems. The Armed Forces know they cannot be solved overnight and they would be suspicious of anyone who claimed otherwise. They also understand that personnel policy alone cannot resolve the imbalances between wider Defence Policy, commitments and resources. It must be part of a whole but, if we do not have a magic wand,

we do have a determination to get things done. If some of the proposals in our Policy for People seem modest it is only because we have promised what we can deliver. Addressing the personnel problems that affect the Armed Forces will take time, trust, and money. Trust needs to be earned and will only arise from the delivery of tangible improvements in overstretch and undermanning.

"We are continually away from our families - there is no incentive to stay."

10. Unit Overstretch. Some of the causes of unit overstretch (too few units to meet commitments) are avoidable. So we have decided, as described elsewhere, to address the causes to ensure that there is a much better balance between resources and commitments. Specifically in the Royal Navy we have reduced the peacetime tasking required from the destroyer, frigate and submarine forces. In the Army, we will maintain our current level of commitments but increase establishments by 3,300 personnel and create a sixth deployable brigade. The size of Royal Air Force front line has been set against the level of commitment we expect it to meet. Extra logistic and medical units will be formed for all three Services and, as they become fully manned, will relieve overstretch in some of the most hard pressed areas. These measures are described in detail in other essays. It will take time for them to produce results but we are determined to put them in place as quickly as possible.

"Constant commitments are stopping people from training properly and developing their careers - so they leave early."

11. Individual Overstretch. For a large number of Service personnel the effects of unit overstretch are exacerbated by undermanning, which together cause individual overstretch. At present we do not have enough information to determine the size of individual overstretch or to identify solutions. All three Services are looking to remedy this. The Royal Air Force has developed a technique to record separated service. The Royal Navy and the Army are looking to adopt a similar system to ensure that individual overstretch and turbulence are managed as equitably as possible. In the meantime, the measures we are introducing to alleviate unit overstretch should also lead to reductions in individual overstretch. Matching resources to commitments will reduce turbulence and bring some stability back into people's lives.

"Manning is getting worse and we cannot see that the SDR will change anything."

12. Undermanning. The effects of undermanning are obvious, the causes many. At its simplest it happens because we neither recruit sufficient numbers nor retain Service personnel for long enough. This has caused a vicious circle to ensue, where undermanning causes individual overstretch, itself a function of unit overstretch, which then causes further undermanning and so on. This will be a difficult circle to break, but we intend so to do.

13. Breaking the Circle. We intend to break the circle by removing unit overstretch and

achieving full manning (through improving recruiting and retention) so that we can reduce individual overstretch to manageable proportions. We expect largely to remove unit overstretch once we reach full manning. If we are successful, full manning in the Royal Air Force should be achieved by 2000, the Royal Navy by 2002 and the Army around 2004. The increase in the Army establishment described above is the main reason why it will take longer to reach full manning. Once reached this will have a significant impact, for the better, on individual overstretch.

14. To maintain proper, balanced career structures, we may not be able to achieve full manning without some redundancy in a limited number of employment categories. This will not be on the scale of previous programmes. There may be about 200 redundancies in the Royal Navy as a whole, targetting certain specialist categories and on a voluntary basis. No redundancies are envisaged in the Army or the Royal Air Force.

15. Improving Recruiting and Retention. The issues most frequently recorded by the SDR liaison team which would improve recruiting and retention included better terms and conditions of service, improvements in pay and allowances, better quality of training, reducing overstretch, allowing service beyond 22 years, providing opportunities to gain civilian qualifications during service, addressing concerns about family life, ensuring equality of opportunity and providing better accommodation. Other evidence from recent leavers' surveys showed that reducing separation from family and friends and improving promotion prospects would also be important.

16. All of these suggestions have been considered carefully and have been used to develop a package of measures, building on much that was already being done, to help the individual and the family, both in the short and long term, and which we believe will improve recruiting and retention.

Improvement Plans - Strategy for the 21st Century

"We need a vision for the future."

17. To provide a framework for addressing the problems we have identified, we need a comprehensive personnel strategy to take the Armed Forces into the next century. It must:

- incorporate all that is best in current practice, build upon the important work already in hand and respect the traditions of the three individual Services, especially the ethos and values needed to support operational capability;
- provide jobs which are rewarding and challenging;

- allow us to recruit, retain and motivate the people we need by offering pay, allowances and a pension scheme broadly comparable to those in the civilian sector, but which recognise the demands of service life and the role of the Armed Forces Pay Review Body;
- enable individuals to realise their full potential during their service, provide equality of opportunity irrespective of race, gender or religion, and assist them to prepare for subsequent careers;
- manage postings so that the operational requirement is met, but take individual aspirations for family stability into account as far as practicable.

Underpinning our strategy will be measures to improve recruiting, retention and resettlement. Critical to success will be measures to reduce overstretch and undermanning. These, however, will take time to have the effect we want.

18. We will therefore proceed with other measures whose effect on the individual and Service family will be more immediate. To improve recruiting we will continue with our measures to embrace all sections of the community, irrespective of gender or race and we will improve the provision for education and training on joining and within the Services. This will re-emphasise the value of a career of first choice in the Forces.

19. We also aim to improve retention with a range of new measures including: enhancements to operational welfare, introduction of a common leave entitlement and a programme to improve standards of single living accommodation.

20. We intend to address the concerns of Service families. As a first step we will establish a families task force. We will also ensure that the already high quality of education delivered by the Service Children's Education Agency is enhanced even further.

21. We intend to introduce a career transition service and, in a major initiative, we will improve aftercare provision with the establishment of a veterans' advice cell.

Improvement Plans - For The Individual

'LEARNING FORCES' - IMPROVED PROVISION FOR EDUCATION AND TRAINING

"To improve recruiting, give the potential Serviceman at the Recruiting Office a definite lead on his career and what qualifications he may attain."

22. Our consultation process reinforced our view that the perceived lack of opportunities to

gain recognised civilian qualifications discouraged potential recruits from joining and caused Service personnel to leave prematurely. Within the framework of the Government's 'Learning Age' proposals, our 'Learning Forces' initiative will introduce a range of measures for the provision of better opportunities for personal development linked to academic, vocational and professional qualifications. We will provide substantial additional resources to fund these initiatives, based on the following principles:

- competence in key skills, related to national targets and rank/employment;
- the opportunity to gain recognised and transferable qualifications;
- funding for learning activities during and after service;
- provision of Personal Development Records;
- access to information, advice and modern learning facilities, irrespective of rank, age, employment or location;
- return the individual to the civilian workplace with "added value".

23. Key Skills. We will take action to ensure that all recruits will have an opportunity to gain an appropriate level of competence in the six key skills identified by Department for Education and Employment (DfEE) as needed by all in the workplace. Those skills include competence in literacy, numeracy and information technology. From 2000, some 1,300 school leavers a year will also have the opportunity to attend the new Army Foundation College for a 43 week course which will offer a National Traineeship and a Level 2 Scottish/National Vocational Qualification which will include Level 2 Key Skills commensurate with the ability of the student.

Recognised and Transferable Qualifications

"There is a need for civilian recognised qualifications."

24. Scottish/National Vocational Qualifications (S/NVQs). We recognise the considerable recruitment, retention and resettlement benefits of providing civilian recognised and transferable training for our military and civilian personnel, particularly S/NVQs. We wish to ensure that all military trade and professional training that can gain civilian recognition and formal accreditation does so. Most technical training within the Armed Forces already attracts civilian qualifications. We estimate that up to 70% of all training within the Armed Forces could be so eligible.

25. S/NVQ Level 2. For the purposes of illustrations, NVQ Level 2 is the broad equivalent of the academic attainment of achieving five GCSEs. Additional resources will be provided to give

all non commissioned service personnel the opportunity to gain an S/NVQ Level 2 within three years, or by the time they complete their minimum engagement, whichever is the later.

Learning Credits

"We need to offer more in-Service education to retain people."

26. We will expand education and vocational training opportunities for the Armed Forces. Service personnel will be able to claim 'Learning Credits' for education and vocational training both while serving and for some time afterwards. When the DfEE Individual Learning Accounts are established we will, if necessary, adjust our proposals more closely to reflect them. We believe that it is right to retain an individual contribution to these schemes.

Personal Development Record

27. All military personnel will be provided with a Personal Development Record (PDR), to be retained throughout their Service career. That, in line with the DfEE Learning Age proposals, will be used to record the experience and qualifications they gain and provide opportunities to signpost routes/means for further development. It will be tangible proof for a prospective employer of their record of achievement and aspirations. The introduction of PDRs will be supported by a developing structure for accreditation of military education, training and experience in terms of national credit ratings.

IMPROVED SINGLE LIVING ACCOMMODATION

"Junior accommodation has been neglected and is in a bad state."

28. The strategy for improvements in the service families estate have not been matched by a similar strategy for improvements in single living accommodation. The SDR Liaison Team found sub-standard single accommodation to be a significant area of complaint. The Armed Forces Pay Review Body has consistently criticised the low priority this has been given in the past.

29. In future, new accommodation will be built so that, in most instances, individuals of all ranks will be provided with a single room. There are plans in place now to raise the standard of some existing single living accommodation, and we have initiated a survey of all single living accommodation to inform our longer term aspiration to improve the whole estate.

OPERATIONAL WELFARE ENHANCEMENTS

"Welfare is key."

30. The provision of welfare support for Service and civilian personnel deployed on operations is a key component in the maintenance of morale and thus the overall effectiveness of deployed forces. Small enhancements in this area can cause a disproportionate increase in morale. Although much is already done, we have recognised that in two areas - the financial assistance provided for telephone calls home and the provision of Rest and Recuperation flights - more is needed.

Telephone Calls. Personnel deployed on operations in for example Bosnia and the Gulf are currently entitled to financial support for welfare telephone calls roughly equating to a three minute call a week. That is too short for a satisfactory family call, particularly where young children are involved. We will increase the time for entitled personnel to ten minutes. We are investigating extending this provision to personnel on operational ships dependent on telephone facilities being available and operational feasibility.

Additional Rest and Recuperation Flights. Our experience in Bosnia has shown that a small proportion of Service personnel may be deployed for eleven months or more. Those personnel are currently eligible for two rest and recuperation flights. We will increase the number of flights for such personnel to three. For those deployed for longer than 13 months, additional flights will be provided.

Satellite TV on Royal Navy Ships. We are exploring extending the provision of satellite TV to all Royal Navy ships whilst at sea. It is currently installed on our aircraft carriers where it has been an important factor in contributing to morale, particularly on prolonged deployments. There are, however, technical difficulties in extending it to the rest of the Fleet and work is in hand to determine whether our aspirations can be realised.

31. **Allowances.** Enhancements to operational welfare need to be seen within the context of the 1995 Independent Review. An updated allowance package, based on its recommendations, was introduced last year. This was targeted at aligning allowances more closely to our current operational stance. It included a longer separated service allowance for those on long or frequent periods on operations, exercise and training away from their base and a get you home allowance which provides a contribution to the cost of travelling home for those on detached duty or courses. We will monitor the effectiveness of these allowances to confirm they are having the consequences we intended.

LEAVE ENTITLEMENT

32. The Services do not currently have a common annual leave allowance. Junior ranks in the Army and Royal Air Force, serving in the United Kingdom and the rest of the world, less North

West Europe, are allowed less than senior ranks and officers. We therefore intend that, from April 1999, all ranks of all three Services should move to a common leave allowance of 30 'working days'. For this purpose the 'working days' of the week are Monday to Friday.

NEW CAREER TRANSITION SERVICE

33. We will improve current resettlement provision. This autumn we intend to introduce the Career Transition Partnership, in conjunction with a private sector supplier. For leavers with over five years' service, it will provide career transition support, including unlimited counselling, workshops and nationwide job finding support. At the same time, we will introduce enhanced job finding support for those with between three and five years' service. Our marketing campaign "Access to Excellence" will continue as will all current single Service resettlement support. We will also introduce, from April 1999, a graduated resettlement scheme. This will make available increased time, up to a maximum of seven weeks, linked to length of service, for career transition preparation. Our overall intention is to ensure that Service leavers receive the best preparation for their future careers.

VETERANS' ADVICE CELL

"SDR should be looking to improve the welfare support organisations."

34. Ex-Service personnel and Service charities made us aware that there is no single point of contact which ex-Service personnel can approach so that they can be directed to those best able to deal with their particular problems. We will remedy this with the establishment of a Veterans' Advice Cell. This will be staffed by Service or ex-Service personnel who can provide guidance on where and how to obtain specific expert assistance. The Veterans' Advice Cell will also enable us to identify quickly any changing welfare requirements for veterans by monitoring the type and frequency of the requests that are made. That will enable us to identify and address issues before they become major problems. We plan to have the Cell operational, within the MOD, later this year.

Improvement Plans - For The Family

"To have an effective review you need to canvas the views of our wives."

35. **Service Families Task Force.** We are keenly aware of the problems that Service life can pose for families. "Following the Flag" means that spouses will invariably have to give up their jobs in circumstances which render them ineligible for the Job Seekers' Allowance, will have to find places for their children in suitable schools, register with a doctor and struggle to find an NHS dentist. That is an exhausting but not exhaustive list - additional problems occur over social security allowances and access to some NHS treatments. We intend to establish a task force to address the concerns of Service families. This will take time but we are determined to

drive it forward.

ENHANCEMENT TO PROVISION FOR SERVICE CHILDREN'S EDUCATION

36. Service personnel are concerned that their children are not disadvantaged as a result of their service overseas. The majority of Service children overseas attend schools maintained by the Service Children's Education (SCE) Agency. We intend in SCE to mirror the initiatives announced by the DfEE during the past year including the literacy and numeracy projects, improvements to school security (for example, to provide school fencing for those without) and training for School Advisory Committee members. Increased funding for these initiatives will be provided.

37. Those measures are in addition to the funds already allocated to replicate the provision of nursery education in civilian schools for all four year olds. Under this scheme, and in locations where there is already an SCE school or garrison playgroup, the facilities will be extended to cater for all four year olds with effect from September 1998, and sooner in some areas. In overseas locations where there is no integral SCE provision, or where numbers are insufficient to create a viable nursery class or pre-school group, Service parents will be given financial assistance to offset the costs of sending their children to a local nursery school.

Improvement Plans - Personnel Management

EQUAL OPPORTUNITIES

"Will SDR comment on discrimination?"

38. **Equal Opportunity Training.** A Tri-Service Equal Opportunities Training Centre has been established at Shrivenham. Its purpose is to provide comprehensive training to Service Equal Opportunity Advisers, trainers and senior officers (i.e. Brigadiers or equivalent and above). All officers at brigadier level or equivalent are to receive mandatory equal opportunities training which will emphasise their leadership responsibility in this crucial area. All recruiting staff, new recruits, NCOs, junior officers and commanding officers now receive equal opportunities training.

39. **Women.** The three Services are wholly committed to maximising opportunity for women in the Armed Forces, except where this would damage combat effectiveness. 96% of posts in the Royal Air Force and 73% of the total posts in the Royal Navy and Royal Marines have been open to women for some time. On 1 April 1998, the Army increased the posts open to women from 47% to 70%. We have been reviewing whether we could improve the opportunities still further. As a result, we have decided that some 1300 posts in Army and Navy specialist units attached to the Royal Marines will be open to women. We have, however, concluded that

posts in the Royal Marines, the RAF Regiment and those in the Army whose primary role in battle is to "close with and kill the enemy" should remain closed to women until we can properly assess, in two to three years, the impact on combat effectiveness of the recently introduced changes in the Army. Women are also currently excluded from service on submarines and as Royal Navy mine clearance divers for medical or practical reasons. Reviews of these areas will be completed towards the end of this year.

40. Servicewomen currently represent around 7% of the total strength of the Armed Forces. More women are joining the Forces and fewer are leaving. In the last year 14% of all new recruits were women and there was a 30% decrease in the numbers leaving. We hope that the numbers of recruits will increase, particularly as the Army has specifically targeted women in its most recent recruiting campaign. Additional work is also under way to establish a system of monitoring gender related issues including recruiting and maternity related aspects, building on experience gained from the ethnic monitoring programme. That will provide us with objective evidence of our success, or otherwise, on gender issues.

41. **Ethnic Minorities.** We are determined that the Armed Forces should better reflect the ethnic composition of the British population. Currently some 6% of the general population are from ethnic minority backgrounds, but they make up just 1% of the Services. This must not continue. We have set a goal of attracting 2% of new recruits this year from ethnic minority communities for each Service. We want that goal to increase by 1% each year so that, eventually, the composition of our Armed Forces reflects that of the population as a whole.

42. To encourage more members of the ethnic minorities to join the Armed Forces, and stay in once they have joined, we have been working hard to accommodate religious and cultural differences such as dress and diet wherever possible, while still maintaining combat effectiveness. We are working to develop and increase outreach work with local communities. We will continue to work closely in partnership with the Commission for Racial Equality (CRE), to persist with our efforts in the recruitment of ethnic minorities and to combat racism. We were delighted that earlier this year the CRE agreed to lift the threat of legal action against the Department and replace it by a partnership agreement between the MOD and the Commission. The Chairman of the CRE described this as, "A model of leadership in action". All three Services achieved a modest improvement in recruitment in 1997/98. We have introduced a further range of measures including ethnic minorities recruiting teams. There is a long way to go but we are fully committed to achieving this goal.

43. **Harassment.** All personnel have the right to work without fear of harassment or bullying. We have made clear our policy of zero tolerance on harassment. Any form of harassment is completely contrary to the military ethos; it is unacceptable and will not be tolerated. That is made explicit in directives promulgated by each of the three Services. We are determined that the principles laid down in those directives will be followed by all and that appropriate action will be taken where this does not occur.

44. Confidential Support Telephone Lines. Our policy of zero tolerance is not new. Confidential support telephone lines have been introduced (although they may not always be accessible from ships at sea) to offer completely confidential guidance across the whole range of personnel matters. They also allow personnel to seek advice on how to deal with harassment. Support lines do not undermine the individual chain of command arrangements for complaints, which remain in place.

Improvement Plans - Longer Term Initiatives

DEVELOP A COMMON OVERARCHING PERSONNEL STRATEGY

45. One of the key recommendations of the Independent Review for the improvement of personnel policy was that the MOD should develop an overall strategic personnel policy and then ensure that each Service developed its own sub-strategy, policies and practices relevant to its own needs. This is a recommendation we wish to see implemented. We will produce an overarching personnel strategy with an associated action plan clearly identifying specific MOD and Service responsibilities. The Services are producing their own human resources strategies which will be linked into the overall strategy.

46. The introduction of a common personnel strategy will require care. The Independent Review recognised that some employment conditions needed to be common and some to be different. Those differences that must remain to preserve operational effectiveness will be kept; those that are not will be harmonised. The introduction of such a strategy should result in an increase in operational effectiveness, avoiding the difficulties which can occur on joint operations because of unnecessary single Service differences. We intend to introduce best practice across all three Services and secure administrative benefits through the use of common and standardised procedures. We will not, however, undermine the individual identity or ethos of each Service, but will recognise the contribution all three Services make to the provision of overall defence capability.

BETTER CAREER MANAGEMENT

47. The Independent Review recognised that all Service personnel were required to be mobile, that Service commanders rarely had the opportunity to select those personnel posted to them and that, accordingly, the quality and reliability of central personnel management in each of the Services was unusually important. We will continue to pursue improvements in postings policy and in career management. In an era of increasing openness, we wish to encourage a greater contribution by the individual in the development of his/her career in active liaison with career managers, so that the individual has the opportunity to fulfil his/her full potential.

48. Common Appraisal System. We need a consistent approach across all three Services to

evaluation and proper assessment of performance against objectives. Although the Royal Navy and Royal Air Force have just introduced new appraisal systems, we have recognised the further advantages to be gained from having a common system across the Armed Forces. The Services have now decided to adopt an essentially common appraisal system for all commissioned officers. The new, common system will continue to provide feedback on performance and assist processes for identifying candidates for promotion, appointments and further training. In addition, it will be as simple and un-bureaucratic as possible and comply with the requirements of liP. We aim to introduce the system in the year 2000.

49. Career Structures. Significant work has already been done in all three Services to develop future officer and non commissioned career structures, informed by the recommendations of the Independent Review, to take account of trends in the wider workplace. We are considering how to make better use of the experience of the non-commissioned other ranks. We would like to maximise the already substantial transfer that currently takes place through later commissioning - between 20-30% of the Officer Corps in all three Services is made up of late entry commissions or commissions from the ranks.

DEVELOP AN OVERARCHING RECRUITING STRATEGY

"We must attend to recruiting problems now, as we are overstretched."

50. We need an overarching recruiting strategy to get best value out of the almost £100M we spend each year on recruiting. This strategy must co-ordinate more closely our current recruiting effort and spread best practice. We need to ensure that sufficient numbers of young people of the required calibre are attracted to a career in the Services so that the correct balance of age, skills and expertise can be maintained within both our regular and reserve Forces. Failure would lead to a loss of operational capability.

51. We must therefore ensure that the role of the Armed Forces in the 21st century and the attractions of a Service career are widely understood across the whole community, hence the importance we attach to our initiatives on lifelong learning and equal opportunities. Our strategy will:

- emphasise the rewarding and challenging career opportunities within the Services (including the opportunity for all to gain recognised civilian qualifications);
- provide effective enquiry and recruiting arrangements, and will ensure that all applications are processed fairly and properly;
- provide a focus for all recruiting activity while maintaining the image of the three single Services - we recognise that potential recruits will want to join "the Navy", not "Defence".

INTRODUCE NEW PAY SYSTEM

"Pay is fundamental to the SDR otherwise we will lose our expertise."

52. Since 1971 the level of Service pay has reflected the recommendations of the Armed Forces Pay Review Body (AFPRB). Throughout the consultation process we were told that the current pay structure was inadequate to meet the future needs of the Armed Services. We share the view of the AFPRB that there is a need for a new system. We have endorsed the work which was already in hand to introduce a new pay structure whereby an individual's pay will increase within a rank in accordance with specified criteria; i.e. experience, professional qualifications and satisfactory performance. We hope to have this established by 1 April 2000.

53. Additional pay will continue to be paid to respond to the recruiting and retention needs in specialist skill groups. Evidence is being prepared for the AFPRB's consideration for a simple, flexible and better system.

INTRODUCE PAY AS YOU DINE

54. Currently Service personnel occupying single living accommodation pay a daily food charge, irrespective of whether or not they actually consume the meals provided. Many Service personnel feel this is unfair. The Independent Review recommended the earliest practicable introduction (with the exception, notably, of catering services in the field and in ships) of a system enabling military personnel to pay only for those meals or items actually consumed. That is Pay As You Dine (PAYD). Work is underway to determine the Armed Forces' requirements and the full implications for the MOD before preparing a request for proposals from a commercial partner. We envisage a commercial partner would be able to enhance dining facilities (particularly for Junior Ranks), and provide a range of new services such as take away or home delivery.

REVIEW COMPENSATION AND PENSION ARRANGEMENTS

"A person who loses a limb whilst serving his country gets no recompense."

55. **Compensation Arrangements.** Concerns have been expressed about current arrangements to compensate Service personnel for injury, illness and death. These must reflect modern standards and be consistent with the legitimate expectations of Service men and women. A review of the principles underlying a possible new structure of compensation is underway. We wish to establish clear criteria for determining eligibility for awards and to set benefits at levels which are fair to individuals and consistent with good practice elsewhere. A consultation document will be issued.

56. Armed Forces' Pensions Scheme. We also intend to review the Armed Forces Pension Scheme, taking into account the arrangements for the provision of pensions in the public sector and elsewhere. Our objective will be to introduce arrangements which will meet the future manning needs of the Armed Forces in a way that is fair, cost-effective and affordable.

MILITARY DISCIPLINE AND JUSTICE

57. A military system of justice which reflects the unique circumstances within the Armed Forces is vital: but the system must remain up to date and command respect within the Services and more widely. Reforms in the court martial system have been introduced to increase the independence and perceived impartiality of the courts and streamline their operation.

58. Tri-Service Discipline Act. We believe there would be advantages to be gained from combining the three Service Discipline Acts into a single Act. Those differences which the Services need to retain for operational reasons would be kept but reduced to the absolute minimum. That would require a complete rewrite of the legislation but would allow the Services to define their needs for the next millennium and translate them into legislation where necessary. That would be a substantial and complex undertaking which will take some years to complete, but one which we consider would be very worthwhile.

59. Membership of Courts Martial. In recognition of the value of Warrant Officers and their experience in contributing to the administration of justice, the Services will amend the eligibility criteria for membership of Courts Martial to allow Warrant Officers to sit as members of the panel where sergeants and more junior ranks (or equivalent) have been arraigned. This change requires legislation and it will be included in the next Armed Forces Bill in 2001.

Key Points - Service Personnel

For the Individual

- Lifelong Learning - all recruits to have the opportunity for personal development whilst serving and to gain civilian qualifications. Help for all personnel to pursue personal development and gain civilian qualifications during and after their service. As much service experience and as many courses will, as far as possible, be externally accredited to attract valid civilian qualifications.
- Better Single Living Accommodation.
- Improved Operational Welfare.

- Standard Leave Entitlements Irrespective of Rank.
- New Career Transition Support Service.
- Veterans' Advice Cell.

For the Family

- Establish a Service Families Task Force.
- Enhancements to Provision for Service Children's Education.

Personnel Management

Equal Opportunities - maximise our efforts to recruit the very best, irrespective of gender, religious, ethnic or social background. Continue our efforts to make a Service career attractive to all.

Longer Term Initiatives

- Introduce an Overarching Personnel Strategy.
- Introduce an Overarching Recruiting Strategy.
- Better Career Management - common appraisal for commissioned officers.
- New Pay System.
- Review Compensation and Pension Arrangements.
- Pay As You Dine.
- Military Discipline and Justice - changes to membership of some Courts Martial, review of tri-Service Discipline Act.

CIVILIAN STAFF

Current Concerns

"Civilian staff feel that they don't matter."

60. Civilian staff in the MOD make a key contribution to our Defence effort. They undertake many crucial tasks in support of the Services and in some cases work alongside them on operations.

61. Nevertheless, many have felt that they have been undervalued over the last few years. There have been major organisational changes, people have been transferred to private sector employers, have had to move homes when work has been relocated and have faced changed expectations and management arrangements because of decentralisation and delegation. The cumulative effect has been to make people more uncertain about their future careers while at the same time requiring them to cope with 'initiative overload.'

62. It will never be right to put a stop to change. The MOD, like all employers, will continue to improve its performance and adapt to changing circumstances and operational imperatives. However, there is now increasing commitment to policies for civilian staff more attuned to the real needs of people who work for the Department and their families. There is a new focus on promoting excellence in the management of civilian staff, explaining and putting into practice good intentions which may have been expressed in the past but sometimes not properly implemented or given time to take root.

"Everything seems ad hoc, with no overall plan."

63. Our principles for the management of our civilian staff have been set out in our Civilian Personnel Management Strategy Civilian Personnel Management Strategy: An Agenda for the Next Two Years; and in the Personnel Policy Statement. Personnel Policy Statement for Civil Servants Employed in the Ministry of Defence:

- all staff in delegated management units and Agencies remain employees of the MOD, with opportunities across the Department and managed according to common principles of good management;
- MOD is an equal opportunities employer;
- MOD is committed to the Civil Service principles of recruitment on merit through fair and open competition, and promotion on merit;
- MOD will continue to invest in the training and development of staff to enable all to make a full contribution and enhance their potential;
- staff will be equipped with the skills, knowledge and awareness they need and will receive the clear and timely information which they need to do their jobs.

Source: MOD publications, 1995 and 1997

64. Those principles have been underpinned by a wide range of practical measures which aim to preserve the benefits for managers and staff of working in a large and diverse organisation, but give units and individuals more scope to develop skills and careers in ways which best suit them.

CAREER MANAGEMENT

"Some managers don't seem to care about people's careers any more - you're on your own now."

65. Over the last few years, the Department has seen important new systems for civilian management put into place which provide a framework matching best practice in other departments and the private sector. "Competence frameworks" help people identify the skills and experience they need. Revised appraisal systems help people be clear about the key purpose of their jobs, their objectives, and how they are expected to perform and develop. Annual training and development plans are produced and reviewed for individuals and business units. Assessment centres are used for promotions to the key management level below the Senior Civil Service. There is a mixed economy of job advertising and managed job changes to encourage a partnership between individuals, line managers and personnel managers in reconciling the aspirations of individuals and the needs of the Department.

Improvement Plans

66. Against this background, we have identified several areas for additional priority action:

- clearer career information and guidance;
- greater encouragement for continuous professional development;
- active promotion of practical equal opportunities measures and training which make a difference;
- reduced central regulation and more responsive flexible systems;
- better upward and downward communication.

Source: Civilian Personnel Management Strategy: An Agenda for the Next Two Years, (1997)

CAREER GUIDANCE

67. We have already published *Planning for Your Future: a Guide to Career Development in the Ministry of Defence (November 1997)*, a manual of career development guidance which gives examples of the types of opportunities available and guidance on how to assess options. That is just the beginning and further guidance and support arrangements are being developed centrally and in management units.

LIFELONG LEARNING

68. We are determined to encourage lifelong learning. We have increased investment in a range of focused training and development programmes and improved infrastructure for training delivery. We have introduced systems through which people's training and broader development needs are kept under regular review. We have in place the full range of schemes to support day release, adult further education and external training programmes, and we are committed to expanding our involvement in interchange and volunteering programmes with links to the community at large, such as those run by the Prince's Trust.

69. To develop greater professionalism, support is being extended to an increasing number of staff studying for professional qualifications, including MBAs. Much improved arrangements and incentives for professional finance training are in place and we are considering similar measures for other functions. A number of schemes have been developed to help people achieve S/NVQs. These are being expanded. The MOD's modern apprentice scheme for industrial staff, a widely regarded model of its kind, now attracts almost 300 apprentices a year. A wide range of modules is increasingly being provided through information technology based inter-active learning packages available at an increasing number of new interactive learning facilities (ILFs) across the UK and in overseas locations.

INVESTORS IN PEOPLE

70. It is fundamental that the policies and initiatives outlined above deliver results. Our commitment to the Investors in People (IiP) standards and process will be an additional spur to ensure that that happens. Throughout the Department the managers of individual units and their staff are committed to tackle by the year 2000 the gaps they have identified between fine words and best practice. IiP assessments will provide a widely respected rigorous independent check.

Equal opportunities

71. For several years we have placed a high priority on carrying out equal opportunities programmes to enhance the position of minority groups amongst our civilian staff. While some progress has been made, we are completely committed to improving equal opportunities:

- all line managers of civilian staff in the Department - Service and Civilian - will undergo appropriate equal opportunities training over the next three two years;
- action plans are being developed targeting equal opportunity measures for women, the disabled and ethnic minority staff;
- all personnel management policies and procedures have been reviewed to check that they conform with the requirements of the Disability Discrimination Act;
- we have nursery arrangements in an increasing number of locations, and are keen to continue to develop family friendly policies through flexible working and other means;
- we continue to operate harassment helplines for staff in need;
- we will implement the Working Time Directive to ensure that unreasonable demands are not made on people to work excessive hours;
- in monitoring our recruitment of civilian staff from different ethnic backgrounds, we will in future assess progress according to the composition of relevant employment catchment areas. We will pay particular attention to those areas where action is likely to be most needed and most effective.

PAY, GRADING AND CONDITIONS OF SERVICE

"Pay and grading arrangements are too complicated."

72. Important steps are being taken to improve pay and grading arrangements by removing unnecessary complexity whilst providing greater flexibility for managers and staff, yet retaining fair and equitable structures. Improved and simpler performance pay arrangements were introduced last year for most non-industrial staff and a programme of further changes for both industrial and non-industrial staff is under discussion with the trades unions. We wish to see the terms and conditions of both groups of staff brought into line, wherever this makes sense and meets Departmental and staff needs, and thus move towards the concept of a single status workforce for all of our civilian employees.

"Conditions of service and working conditions do not match those of good outside employers."

73. We are determined that our staff should have a package of terms and conditions which match good practice elsewhere and meet modern expectations. Entitlements to annual, maternity and paternity leave are being improved, and work is in progress to develop an

improved pension scheme which will be introduced throughout the Civil Service early in the new millennium.

74. We will also continue to make improvements to the working environment for our staff as has been achieved successfully and cost effectively in the Defence Evaluation and Research Agency at Farnborough and at the Procurement Executive complex at Abbey Wood in Bristol. The proposed redevelopment project for the Main Building will be taken forward on the same basis.

REORGANISATION AND TRANSFER OF WORK

"We are constantly being reorganised."

75. When issues about reorganisation or transfer of work arise, decisions are not being made because of dogma or the latest management theory. An informed pragmatic approach is now being taken, in consultation with staff and their trade union representatives, and the consequences for people, are being properly weighed and evaluated. We have learned a great deal from the extensive Competing for Quality (CFQ) programme. It has enabled the MOD to gain greater value for money from its limited budget. But, we are conscious of our duty of care to our loyal staff and are committed to looking after the interests of those affected by change in this way. To this end, we are introducing a Code of Practice for Transfer of Undertakings (Protection of Employment) (TUPE) agreed with trades unions and Industry which will ensure that the fullest attention is given to staff matters where personnel are transferred from the Civil Service.

CONSULTATION

"Top management does not listen."

76. We will ensure that the views and opinions of our staff are sought, heard and taken into account as policies are developed and implemented. We will use the well-established procedures for consultation with staff and their trades union representatives on changes which have an effect on civilian staff interests. The constructive approach of staff and unions has been a crucial factor in helping produce major annual efficiency gains, and the procedures have served us well as the MOD has undergone the massive and widespread programme of reorganisation, relocation and reductions of the past few years.

77. Those consultation procedures are being modernised and developed, and will continue to be supplemented by the kind of surveys, formal and informal, and direct consultation with staff which have been so welcomed during SDR. Timely upward feedback, and consultation and negotiation with the trades unions as appropriate, will remain a key way of ensuring that our policy for people is properly and practically focused and brings real results. Our liP initiatives

will be helpful here.

CONSEQUENCES OF SDR IMPLEMENTATION

78. Consultation will be particularly important as the SDR is implemented and we take steps to ensure that the MOD continues to match the standards of a caring employer to which we are committed. There are likely to be three key areas of concern to staff:

- **Relocation.** A comprehensive relocation package of compensation and practical assistance, which matches best practice in the private sector, is in place to ensure that when people and their families move home and job the stress is minimised.
- **Early Departure and Redundancy.** Further major reductions of civilian staff are not required as a result of the SDR, but the current assessment is that in addition to plans previously announced a total of approximately another 1,400 posts are likely to be abolished over the next few years. Consequential staff reductions are likely to be considerably less and will be handled with full consultation and, as far as possible, through normal retirements and departures and adjustments to recruitment. Compulsory redundancy will be kept to the absolute minimum; appropriate compensation terms will be available, and professional outplacement services will be provided.
- **Service in Operational Theatres.** Arrangements are in place to compensate for the difficulties and hardships of deployment to operational theatres such as Bosnia. These are designed to be broadly consistent with those for Service personnel and will be updated as necessary to meet new needs.

OVERALL OUTCOMES AND KEY SUCCESS CRITERIA

79. The key test for our strategy and action plans for civilians, like the corresponding plans for the Services, is whether the fine words actually deliver practical common sense results and meet the legitimate aspirations which staff have expressed. We are determined to ensure that our Policy for People does just that over the next few years. Civilians, like their Service colleagues, deserve nothing less.

Key Points - Civilian Staff

Career Management, Training and Development

- Revised appraisal systems

- Better career guidance
- Investment in training and development
- Interactive learning facilities
- More interchange and voluntary programmes
- Support for MBAs, professional qualifications and S/NVQs
- Commitment to lifelong learning

Equal Opportunities

- Action plans for women, ethnic minority staff and those with disabilities
- Appropriate training for line managers - Service and civilian
- Nursery facilities increased
- Family friendly policies including flexible working

Pay and Conditions

- Simpler pay arrangements
- Proposals for streamlined grading arrangements
- Aim to bring industrial and non-industrial terms and conditions in line where appropriate

Investors in People

- Gap between departmental practice and IiP standard will be bridged
- Rigorous independent assessment

Reorganisation and Transfer of Work

- Approach based on pragmatism and value for money not dogma

- Code of Practice for any staff transferred from the Civil Service

Consultation

- Commitment to improved communication with staff and feedback mechanisms
- Continued regular consultation and negotiation with trade unions

CONCLUSION

"Let us ensure that as a result of SDR the conditions of service for our personnel are improved."

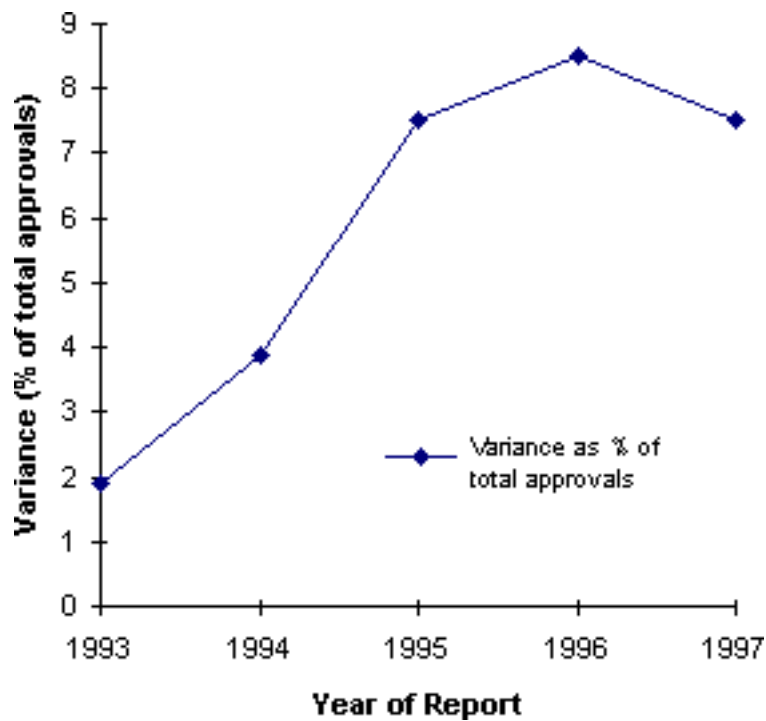
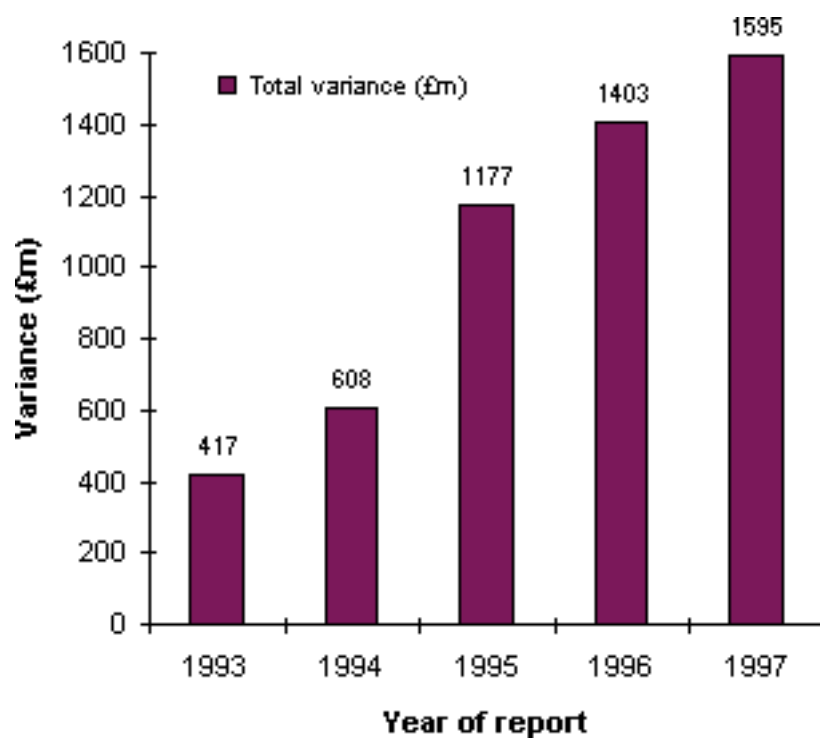
80. Defence depends on the people who provide it, Service and civilian. We intend to build on many of the policies we inherited but our Policy for People also pursues a series of new measures to address the issues raised with the liaison team during the consultation process. We are determined to put in place modern and fair policies which ensure that the Armed Forces and the MOD attract and retain the right people and truly reflect the society they serve.



SUPPORTING ESSAY TEN

PROCUREMENT AND INDUSTRY

1. A central aim of the Strategic Defence Review is to ensure that the Armed Forces are properly equipped. We need to be able to undertake a wide variety of military tasks, from peacekeeping to high intensity conflict. This in turn carries a requirement for equipment that is inherently flexible. Ensuring that the right equipment is available in the right place at the right time is the job of the MOD acquisition staffs. Equipment acquisition is a pan-MOD activity involving the Central Staffs, the Procurement Executive, the Defence Evaluation and Research Agency and the Logistics Commands.
2. Defence procurement has seen significant change over the last few years. New policies, procedures and ways of working have been introduced, such as competition, prime contractorship, pricing non-competitive contracts at the outset and collocation of the various elements of the Procurement Executive near Bristol. These have contributed to a more commercial relationship between the Department as customer and its suppliers. Many projects have run successfully on time and within budget, including the complex Trident submarine and missile programme.
3. Unfortunately, however, annual examination by the National Audit Office (NAO) of the top 25 equipment programmes led them to report that, despite the changes, many major programmes suffer considerable time over-runs. Similarly, after some years of improving cost performance in the 1980s, recent NAO reports have recorded average overall cost over-runs of 7.5%-8.5% above original estimates (excluding Trident and Eurofighter) as shown in *FIGURE 1*.



NOTES:

1. *Source: National Audit Office (HC695 Session 97/98)*
2. *Data for Trident and Eurofighter is excluded.*

4. The main causes of problems are:

- slippage due to technical difficulties, budgetary constraints leading to the postponement of expenditure, the redefinition of requirements and difficulties over collaborative programmes;
- cost over-runs due to programme changes, changes in equipment specification, poor estimating and inflation of prices for defence equipment in excess of inflation in the economy as a whole.

5. Of these, technical difficulties are a major cause of delay. They arise from the complexity of modern defence equipment programmes which make them inherently risky. The current protracted procurement process does not easily provide for the incorporation of technical advances during the final stages of a project. Trying to rectify this by redefining the requirement during the life of the project tends only to bring about further delays and cost increases. Delays arising from collaboration usually occur at the key decision stages, when participating nations have to reconcile their own budgetary constraints and priorities.

6. The Strategic Defence Review offered an opportunity to review the whole of the MOD's current equipment acquisition system, going back to first principles and examining every facet of our acquisition process with open minds. The Parliamentary criticisms formed a basis for this work. By discarding old practices which are no longer appropriate and learning from successful innovation in industry we have identified new ways of working and a new support organisation. As a result we are making radical changes, the most significant since the procurement organisations of the three Armed Services were brought together by the creation of the Procurement Executive in 1972. They will deliver a forward looking organisation using up to date acquisition processes and procedures. The emphasis will be on flexibility, in terms both of processes and organisation, and continuous evaluation to avoid any danger of stagnation.

Smart Procurement

7. In July last year the Defence Secretary directed that the Strategic Defence Review should include a Smart Procurement Initiative. This initiative was a joint exercise with industry, under

the auspices of the Defence Industries Council. It focused on processes rather than organisations and, in consultation with industry, produced a package of measures which acknowledges that procurement is a corporate process involving multiple stakeholders, including industry. Central to its findings is a 'Through Life Systems Approach' to procurement, which defines a new equipment or a new capability in the context of its relationship with other equipments and wider defence capability areas. A coherent process for co-ordinating a new equipment's requirement, linkage with the research programme, specification, acceptance and through-life management is a prerequisite for improved equipment acquisition.

8. Smart Procurement means faster, cheaper and better. The key measures identified in the initiative included:

- fuller early planning of projects with appropriate trade-offs between military requirements, time and costs, followed by more rapid, and hence cheaper, full development and production;
- partnering arrangements with industry, particularly where competition is no longer viable;
- exploitation of new procurement techniques including incremental acquisition (where a less ambitious initial capability is upgraded in lower risk steps) to be supported by concurrent engineering processes in industry;
- improved estimating and predicting - integrated through-life cost forecasting utilising three-point estimating techniques should be applied to both time and cost and co-ordinated with the resource allocation and financial provision;
- improved commercial practices - including measures to improve incentives for contractors, use of firm prices not subject to variation for contracts up to five years duration, greater consideration of contractor past performance in tender evaluation, new intellectual property rights conditions and greater use of electronic commerce;

The sum of these measures should be a new relationship between the Ministry of Defence and its suppliers in which both sides can operate to their strengths, under formal partnering arrangements where appropriate, and which provides industry with the greatest incentive to perform. It is through the establishment of such incentives that the customer/supplier relationship can best be improved to mutual advantage.

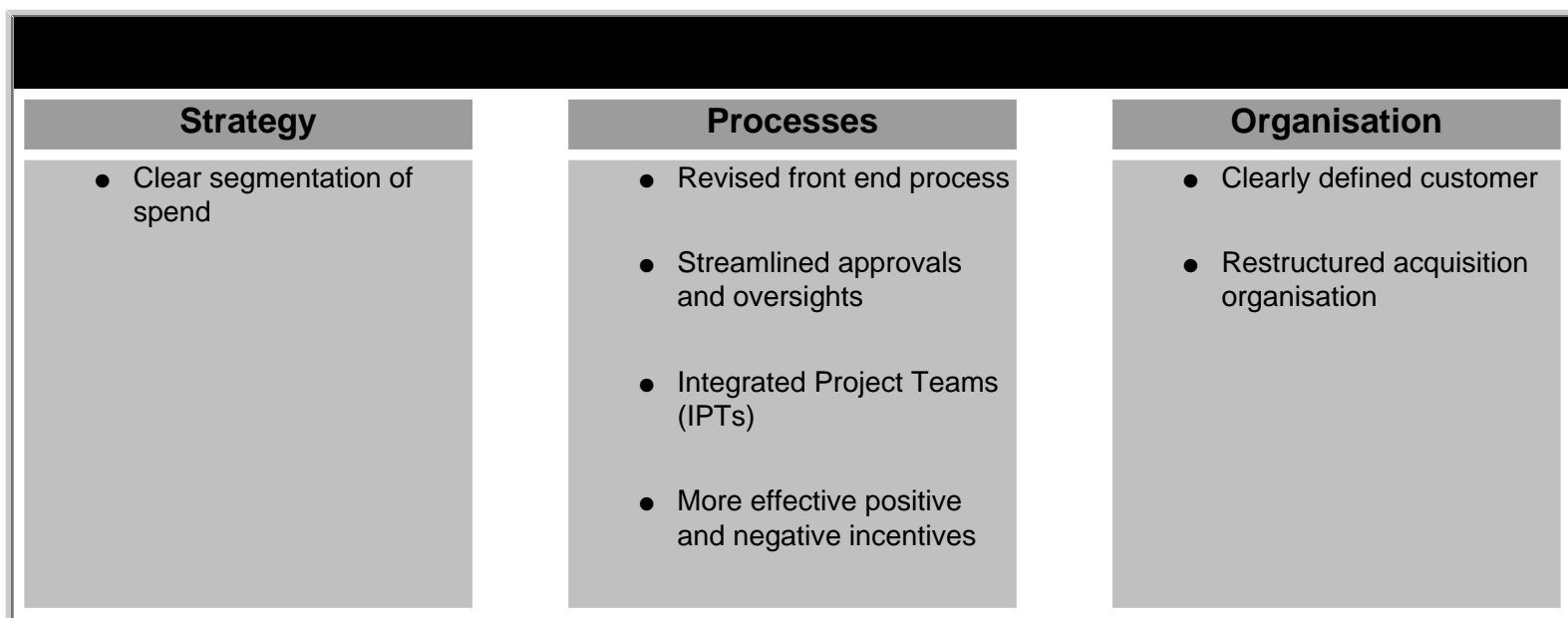
9. Within the Strategic Defence Review, the Smart Procurement initiative included a fundamental re-examination of the acquisition process for the procurement of equipment for the Armed Forces. It looked at the way in which MOD is organised to conduct that process,

and the value that each element of the organisation contributes to it.

10. We analysed how processes in use across the MOD should be adapted to exploit the smart procurement tools and identified a number of organisational models for consideration. The roles of those who identify the requirements, procure the equipment and support it during its life have all been examined to see how any bottlenecks and unnecessary bureaucracy could be eliminated. Industry representatives were included in the mixed teams which carried out the studies. In all, some 22 industry representatives were involved alongside a MOD workforce of 43, together with nine from McKinsey, a firm of consultants.

11. Mixed teams undertook a sequence of studies from which three specific concepts emerged (see *FIGURE 2*):

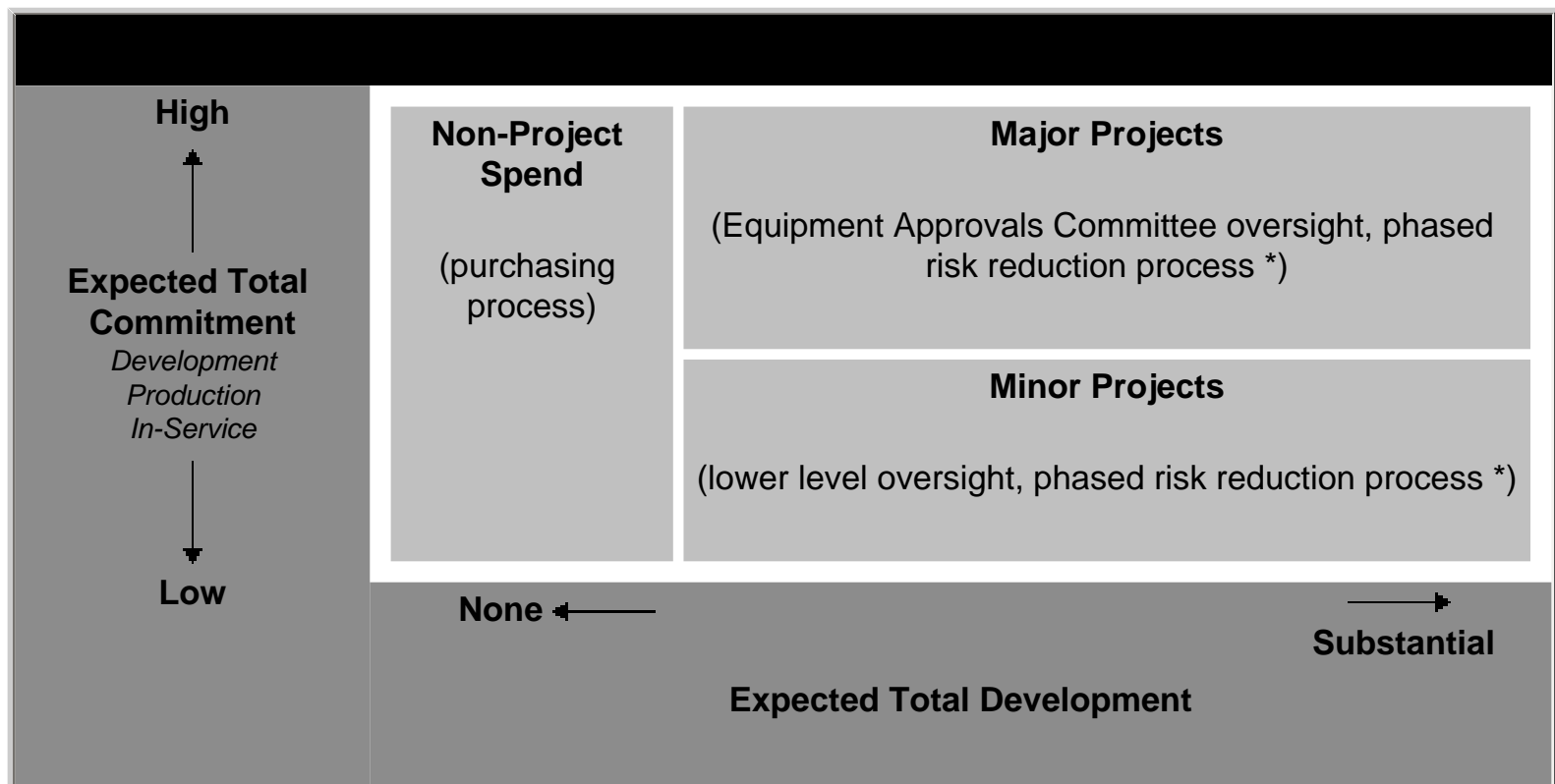
- segmenting acquisition processes into three tiers with processes tailored to each; commodity/low risk items; minor projects and major projects (with collaboration as an important sub-set);
- a single integrated project team bringing together all stakeholders and involving industry except during competition phases under the clear leadership of a team leader able to balance trade-offs between performance, cost and time within boundaries set by the approving authority;
- the need to simplify approval processes and identify more precisely within the MOD the customer for the equipment.



Segmented Acquisition Processes

12. McKinsey's work confirmed how varied equipment acquisition has become. Three main categories of procurement were identified (see *FIGURE 3*), each absorbing roughly one third (£3Bn a year) of total equipment spending:

- **Tier I.** Items available in the market, often for non-defence application, such as standard vehicles and commodity items; the key characteristic is low technical risk and unit price. Defence items already developed (such as spares/support for existing equipment) are similar, although limited sources pose extra complexity for some of these items;
- **Tier II.** Defence specific items for which MOD needs to be an intelligent customer, but which are of intermediate scale and technical risk (e.g., a sub-system stand-alone weapon or an upgrade to an existing equipment not involving major systems integration);
- **Tier III.** The most complex systems, particularly platforms, which also require the integration of Tier I and II equipments and interaction with others. Key characteristics are high unit cost, substantial technical risk and limited sources of supply. Unless purchased off- the-shelf many will only be affordable if developed through an efficient collaborative process.



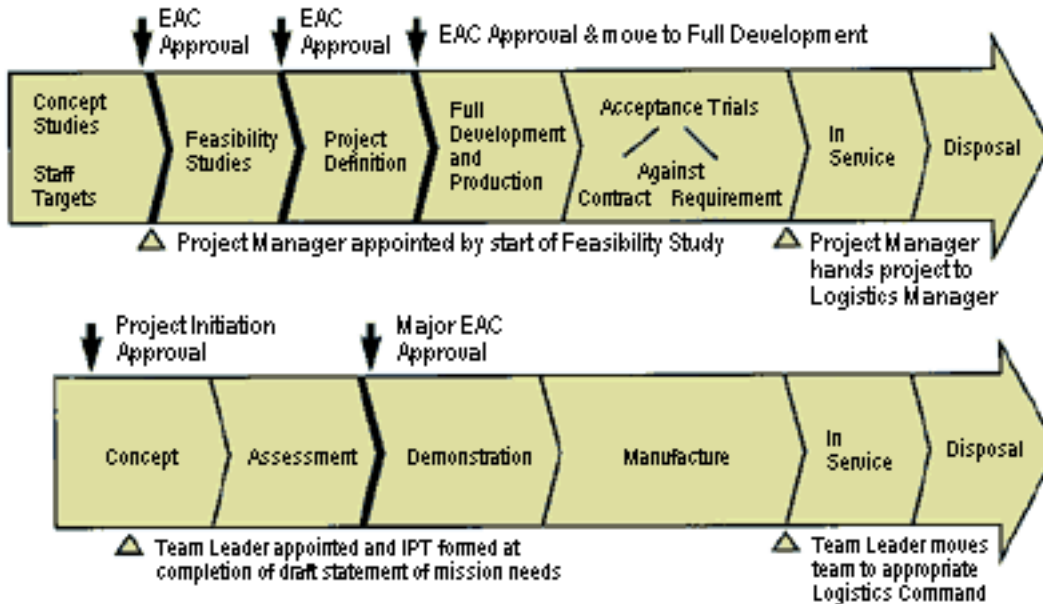
13. The studies suggested that significantly different processes are appropriate for these tiers. There are some common characteristics: defining military need, source selection, a contract or suitable equivalent; acceptance test; and public accountability. But substantially different

depths of skill and breadth of view are needed between the different categories. The allocation to tiers does not judge relative importance: a minor item can be critical to military capability when incorporated in a larger system. It is the segmenting of processes that opens up the possibility of substantial gains. For example, one industry led group looked at simpler procedures for Tier I, such as using credit cards or electronic bidding; whether there is a need for written contracts for smaller items; and the benefits of longer term supply arrangements.

14. Historically, the functions of requirement definition, procurement management and through-life support have been organisationally separated. This has produced arms-length relationships between stakeholders which makes it difficult to get the right balance between time, risk, cost, performance and through-life support. There has also been an inherent optimism in predicting technical risk costs and time-scales. SDR work confirmed the desirability and feasibility from industrial experience of a much more integrated team approach, involving not only staff expert in military needs, technology, procurement and logistics, but also the industrial suppliers (though not during the competition phases). Experience in the US and in industry suggests that such teams can both promote a successful final outcome and offer major improvements in timescale and life-cycle cost. The MOD already has experience of such teams; its Trident team for example. There is however no guarantee of success; much depends on the calibre of the team leader and his/her authority both within the team and when dealing with industry and the customer. In future the leaders of the major project teams will be selected by competition, sometimes including candidates from outside the Department, and serve from four to five years.

Procedures

15. The current process (known as the "Downey" Cycle) aims to control risk by a series of project stages with formal decision points between them. During the Cold War there was pressure for projects to be pushed forward into full development and production quickly so as to meet a specific Soviet threat, even though much risk remained: some ran into technical problems which caused delay. In the changed strategic environment we can take a different approach. More time can be taken for early concept and assessment phases, exploring options and reducing risk by testing technology (typically up to 15% of costs). Those projects that are chosen for full investment in subsequent demonstration and manufacturing phases will be better defined and involve lower risk and are thus more likely to run to planned time and cost. This different project cycle is illustrated in *FIGURE 4* below.



NOTE:

Diagram shows comparison of MOD Procurement "Downey Cycle" and recommended "Acquisition" showing integrated project teams and through life accountability.

16. The existing approvals committee process will be modified and team leaders and customers will be able to take most decisions (with financial and technical scrutiny) but be held directly accountable for the consequences. Currently, equipment projects are formally approved at each stage in the Downey Cycle and, depending on their value, at a very senior level in the Department. While it is right, in view of the sums of money involved, for projects to be subject to regular scrutiny, the effect of the approvals process itself can be to extend the duration of a project. In future it is envisaged that projects should be subject to formal approvals normally twice only: at initiation, and prior to the main investment. Within such approvals, project team leaders will be empowered to make, and be held accountable for, trade-offs between time, risk, cost and performance. Ministers will continue to have visibility of all major or contentious projects.

Organisational Options

17. Before considering organisational options, the Smart Procurement initiative went back to first principles and considered whether MOD needs to have a specialist procurement organisation or could safely leave the whole task to the private sector. Scope was identified for out-sourcing a larger proportion of the acquisition of routine items (e.g. a catalogue of pre-priced minor IT items and general stores) and specific functions. But it was concluded that for

complex projects, MOD (like other managers of large projects) needs to keep core management in-house, while buying in specific skills.

18. Various options were considered by Ministers for ownership of the Procurement Executive. The aim was to achieve greater clarity in customer/supplier relationships within the rest of MOD, and greater flexibility in personnel matters, whilst not reducing scope for personnel interchanges with the rest of MOD.

19. The MOD procurement organisation needs to have a very close relationship with its military customers, capable of bringing together a wide range of interests using the 'single team' approach. While recognising that privatisation provides greater access to private sector expertise and incentives, industry felt it would be hard to reconcile with the single team approach. It was therefore concluded that procurement should remain as an in-house function of the MOD and that our requirements would be met most effectively by turning the Procurement Executive into a Defence Agency and by creating a single, central defence customer in MOD headquarters. Since the Procurement Executive already meets many of the technical requirements of an Agency we hope it will achieve this status by April 1999.

20. The full benefits from these procurement process and organisational changes will take time to materialise, and are not solely financial. One of the principal objectives of these reforms is to prevent time and cost over-runs to ensure that the Armed Forces have the right equipment delivered at the right time and in some instances this will require a greater concentration of expenditure earlier in the procurement cycle. Capabilities may also need to be upgraded more regularly to keep pace with advances in technology.

21. That said, significant and long term benefits are expected not only for the Department as customer but also for our suppliers. These can be summarised as faster, cheaper and better procurement and improved in-service support of equipment with down stream savings in through life costs. For example, initial estimates of potential acquisition cost benefits are in the region of £2Bn. The greatest impact of the reforms will be on procurements which are currently in their early formative stages and therefore most open to change, and the expected benefits will build up progressively as the process and organisational changes are established and applied to existing and new projects. This rolling process of continuous business improvement will need to be carried forward in conjunction with industry and also our major collaborative partners.

Commercial Relationship with Industry

22. Throughout the work on Smart Procurement, the importance of a closer working relationship between MOD and industry has been emphasised. It is seen as a necessary precursor to a more efficient and effective procurement regime. Both sides acknowledged that for many the current relationship was often perceived as adversarial, caused by a lack of

mutual understanding and trust.

23. The successful working relationships that have been forged during the Smart Procurement initiative, and which are already in existence in some project areas, will therefore be encouraged, sustained and expanded. This will be done through a number of routes, including: joint training, enhanced interchange programmes, and inclusion of industry representatives on integrated teams.

24. Care will be taken to ensure that closer links with industry are taken forward under clear guidelines that preserve the formal and overarching accountabilities of the Department for the integrity of the procurement process and the protection of public funds.

Making it Happen

25. In order to ensure that the changes are carried through in an efficient and effective manner a range of implementation measures has been agreed. Among the key elements are:

- a full-time implementation team including industry and limited consultancy support. This will not be another unnecessary layer of bureaucracy. Evidence from previous exercises of this kind is that implementation teams stimulate and assist change;
- development of an acquisition stream for both military and civilian staff which would provide core personnel for the Integrated Project Teams. This will be supported by training and personal development and there will be increased interchanges with industry; it should be a two way process with people from industry spending time in MOD;
- close definition and monitoring of processes backed by clear performance measures;
- a continued Ministerial lead.

A Specialist Stream of Acquisition Personnel in MOD

26. Personnel, training and staff development issues were considered as part of the review of the procurement organisation, with the emphasis on the need to support the new proposed processes and Integrated Project Teams. A clear requirement emerged for the formation of a broad Acquisition stream, encompassing military and civilian staff involved in the full spectrum of the defence procurement process, from the earliest stages of requirement formulation to the final disposal of obsolete equipment. It will cover the current operational requirements, procurement management, contracts, finance and logistics functions.

27. Fundamental to the Acquisition stream will be the definition of a comprehensive set of competences. As well as specific professional skills, these will include people skills such as team-working, communications and leadership. In parallel, schemes such as the new post graduate Systems Engineering degree course at Shrivenham, staff development schemes, and interchange and secondment programmes will be developed to support an acquisition career, and equip staff to meet the needs of the new processes and organisations. Much of the training will be undertaken jointly with industry.

Britain's Defence Industrial Base

28. In its Manifesto the Government stated that "we support a strong UK defence industry which is a strategic part of our industrial base as well as our defence effort". The way in which we have involved industry in the Strategic Defence Review demonstrates our commitment to this statement. A strong industrial base underpins a robust defence policy, so the success of both customer and supplier are closely intertwined.

29. Following the Defence Secretary's request for inputs to the Strategic Defence Review in July of last year and after wide consultation within the defence industry, the Defence Industries Council (see [Note 1](#)) submitted a paper entitled "*Strength Through Partnership*" in October 1997. Individual submissions to the Strategic Defence Review were also made directly from companies within the defence sector.

30. Defence export orders have reached over £5Bn per annum. They are beneficial not just to Britain's economy, but directly to the MOD. Savings to MOD through reduced fixed overhead charges resulting from exports amount to some £350M per year. In addition, the MOD also benefits through receipts from Commercial Exploitation Levy payments for the use of products whose development it has funded. These receipts have averaged some £50M per year over the last five years. The competitiveness of the defence sector, proven by its record of success in overseas markets, further helps to demonstrate the efficiency and effectiveness of those who supply and increasingly support our operations in the field.

Industrial Capabilities

31. The MOD is not alone in its recognition of the need to react to changing circumstances. The defence industrial base that supports Britain's military capabilities is also changing in response to both technological and commercial pressures. The traditional distinction between the civil and defence industrial sectors has been eroded by the increasing importance for defence purposes of technologies of civil origin; developments in electronics and information technology illustrate the point, which applies equally to our allies, that we can no longer think in terms of a defence-unique industrial base.

32. At the same time, defence industry and the defence market has become more internationalised, a trend which looks set to go further. Ownership of the defence industry is becoming more multi-national. Such supply-side developments are consistent with the emphasis in our own plans, and those of our partners, on collaborative procurement.

33. These changes are bringing about an increased level of mutual interdependence in the procurement and support of equipment. Neither we, nor our partners retain indigenously the full range of capabilities to which we need access. This more complex industrial setting makes it all the more important to take careful account of the industrial implications of the available options when taking procurement decisions. We remain committed to securing the best value for money, and each procurement decision will therefore be assessed on its merits, with industrial aspects being assessed against a range of defence based criteria. These include maintaining an ability for industry to support military operations and to regenerate critical equipment stocks, as well as other considerations, such as exports, collaboration and sustaining the future scope for competition.

Defence Industry Restructuring

34. With some 40% of output based on exports British companies must remain competitive in world markets to ensure their survival and commercial well being. The need for consolidation in Europe to maintain global competitiveness has been recognised for some time and is increasingly urgent. Our acceptance of this commercial reality is not at odds with our commitment to a strong defence industry; indeed, we see restructuring as an essential part of achieving this objective. Industry must restructure if it is to prosper in the face of competition from the US "defence giants", and if it is to be able to co-operate with the US from a position of strength.

35. The Prime Minister, together with President Chirac and Chancellor Kohl, gave fresh impetus to the restructuring process in a trilateral statement which was issued on 9 December 1997. This called on industry to present their plans for industrial restructuring by 31 March 1998. The four Airbus partners (British Aerospace, Aerospatiale, DASA and CASA) responded to this challenge by presenting a joint report on 27 March. This indicates that the companies have reached broad agreement that the target structure should be a single, integrated European Aerospace and Defence Company. We welcome the broad measure of agreement reached.

36. Whilst detailed restructuring plans must be led by industry, we recognise that governments can help to facilitate such developments. As a major customer of the defence industry, we must keep them informed about our future programmes to provide a sound basis for commercial decisions. The Strategic Defence Review has set out to achieve this for Britain. And we can negotiate international agreements to underpin restructuring. In the short term, these include issues such as: security of supply, security of information, export procedures,

research and technology funding, and intellectual property rights. These issues are to be addressed within a Letter of Intent which we anticipate will receive Ministerial agreement in July 1998. Italy and Spain have now joined these discussions, and we are proceeding on a five nation basis.

Collaboration

37. International collaboration is of increasing importance to our forward equipment programme. It offers tangible military, economic and industrial benefits and it is essential that the UK remains at the forefront of developments in this area of joint endeavour. We continue to work actively within NATO and with our partners in the Western European Armaments Group, which operates within the framework of the Western European Union, to identify opportunities for collaboration, promote a stronger European Research effort, establish a more open and competitive market for defence equipment in Europe and address many of the difficult issues concerning the European defence technological and industrial base.

38. British membership of *Organisme Conjointe de Co-operation en matière d'Armement* (OCCAR), the quadrilateral armament structure with France, Germany and Italy, also presents a real opportunity to establish with our major European partners improved collaborative practices which deliver value for money products able to compete effectively in world markets. Our work on 'Smart Procurement' should be beneficial to such a process. We remain fully committed to the pursuit of common OCCAR objectives - which includes the extension of membership to other states and the establishment of a 'legal personality' - with our current partners.

Conclusion

39. The MOD must procure the equipment the Armed Forces need, when they need it. We must ensure that the Services have equipment which is capable, reliable, and durable. It must be procured in time, and to cost; to do otherwise, as has happened all too often in the past, would be letting down not only our Service men and women, but also the taxpayer. A radical initiative was clearly needed, and has produced a blueprint for a better way of procuring defence equipment. We now have the means at our disposal to ensure that, in future, the Services have the capability they need, and taxpayers the value-for-money they deserve.

Note

1. *The Defence Industries Council is the collective term for those individual industrialists and representatives of the four major defence trade associations (the Society of British Aerospace Companies, Defence Manufacturers Association, Federation of the Electronics Industry and British*

Naval Equipment Association) who represent industry's views on the National Defence Industries Council chaired by the Secretary of State for Defence. This is the primary vehicle through which the MOD consults the defence industries on matters of common interest.



SUPPORTING ESSAY ELEVEN

SUPPORT AND INFRASTRUCTURE

Introduction

1. From the outset, the Government made it clear that the Strategic Defence Review would be policy-led, not resource-driven. But this did not mean that resources could be disregarded. On the contrary, it was recognised that a crucial element of the Review would be a comprehensive re-examination of every area of defence business, to ensure that the defence capabilities required by our policy objectives are generated as cost-effectively and efficiently as possible. As the Defence Secretary put it in his speech to the Royal United Services Institute on 18 September 1997:

"The Strategic Defence Review will be seeking to ensure that, as far as humanly practicable, every pound spent on defence will be spent both wisely and well."

2. This general duty to the taxpayer was reinforced by the specific imperative to identify savings which would enable us to repair inherited gaps in capability, as well as to meet emerging requirements identified in the Review. Accordingly, a dedicated strand of the Review was established to find the maximum possible level of efficiency savings by thoroughly scrutinising, in particular, defence support and infrastructure.

3. The detailed results of the work undertaken are described below. Overall the exercise succeeded both in achieving significant new savings to help rectify capability deficiencies identified elsewhere in the Review process, and in putting in place a series of system and organisational improvements that will pay continuing dividends in the future.

Context

4. The drive for efficiency in the conduct of MOD's business is not new. Since the end of the

Cold War, defence has had to adapt to managing within a budget now 29% smaller in real terms than in the mid-1980s. This meant a sustained and continuing effort to drive down operating costs, reduce overheads and maximise the output of effective defence capability from the provision available. The main features of this effort have been:

- a complete re-design of the Department's management and budgetary structure;
- a series of specific efficiency reviews, notably the Defence Costs Study of 1994 which took over £1Bn a year out of support costs;
- the biggest Market Testing and Contracting Out programme in government;
- a major Private Finance Initiative programme, developing increasingly innovative forms of partnership with the private sector;
- headquarters reduction which has cut London based personnel by 60% since 1990, and reduced the Department's core headquarters staff by over 30%;
- an annual efficiency planning system covering all operating costs and fully integrated with the resource allocation system;
- efficiency savings which have now accumulated since the end of the 1980s to over £4Bn annually.

5. The Review has built on these foundations, and complemented them with a series of important new proposals for change. Work on defence assets has proved particularly fruitful. Previously, relatively little management attention had been paid to the cost of owning capital assets, which was not apparent under cash accounting. The imminent introduction of commercial-style accounts throughout MOD, and the preparatory work to draw up balance-sheets, provided an invaluable point of departure for the comprehensive studies of defence asset holdings described below.

Approach to the Efficiency and Assets Work

6. At the start of the Efficiency and Assets workstage of the Review, all of the Ministry of Defence's 13 main operating divisions ('Top Level Budgets') were required to conduct thorough business analyses of their management areas, and to draw up Management and Efficiency Audit Reports. The purpose of this was to look radically at the scope for providing the same output for less resources. Management areas were also required to review their asset holdings and consider the scope for reduction or better utilisation. Another major theme was the promotion of Public Private Partnerships - identification of new ways of working with the private

sector in more cost-effective arrangements for meeting defence requirements. And, across the board, management areas were tasked to consider the scope for slimming management hierarchies and reducing overheads.

7. The response was impressive. Inherited forward efficiency plans already envisaged that, over the four years from 1998/99, considerable new efficiency gains would be achieved. As a result of this exercise, the planned efficiency achievement across the Department was more than doubled.

8. This, however, was only the first step. Ideas on how to further improve efficiency were invited from MOD Service and civilian personnel, and the views of the Trades Unions and industry were canvassed. External involvement was an important feature of the work, and a number of outside experts contributed generous help to the various different strands of the work. Proposals, too, came forward from the main operating divisions for efficiency improvements with wider implications going beyond the competence of their particular areas.

9. Accordingly, the 'bottom-up' approach of the Management and Efficiency Audit Reports was complemented by a series of wide-ranging 'top-down' studies. Most ran across organisational boundaries and particular emphasis was laid on developing new joint approaches - as between the three Services, and their civilian counterparts where relevant. In many areas, this was the key to increasing both efficiency and effectiveness, and to eliminating unnecessary duplication and overhead. Indeed, the Defence Secretary established the presumption that services should be provided and functions carried out on a joint basis, unless there were good reasons for continued management on single-Service lines.

10. The major elements of this area of work fell into the four broad categories discussed below. Associated work on improving MOD's procurement of equipment and materiel, and restructuring our procurement organisations, is covered in the separate essay on "[Procurement and Industry](#)".

Assets

11. Fighting equipment apart, the MOD's principal assets comprise land and buildings, and stocks. Comprehensive reviews of both areas were carried out and identified major savings.

Review of the Defence Estate

12. The MOD is a major land-owner in Britain. The majority of our holdings are training land, which is heavily utilised and remains at a premium. But we also occupy a built estate of some 80,000 hectares. Properties worth about £700M have been sold since 1990, in addition to the sale of the married quarters estate. Despite these significant disposals, the Review began with

a presumption that rigorous scrutiny could identify scope for additional receipts and reducing running costs. All parts of the Department, the Treasury and the Cabinet Office Efficiency Unit contributed to this work, together with private sector advice, particularly on the management of the estate.

13. Major disposals. Our re-examination of the defence estate should enable us to double the inherited programme for disposal receipts over the next four years to more than £700M. The Review focused on higher value properties, particularly in London. Our 100 highest value sites across the country were reviewed thoroughly. Most meet long-term operational requirements and cannot be economically replaced elsewhere, but all will be kept under review. Of the London sites:

- the Duke of York's Headquarters in Chelsea, principally occupied by the Territorial, Auxiliary & Volunteer Reserve Association for Greater London and Territorial Army units, will be sold and its occupants re-accommodated as necessary;

- Chelsea barracks needs to be replaced (not necessarily on its present site) and this will be achieved through a Public Private Partnership project;

- the Millbank barracks site is also included in the disposals programme, as are a number of smaller London sites;

- London headquarters office buildings have already reduced from 25 in 1993 to seven today, and will now reduce to just two (the Whitehall Main Building and the Old War Office Building) by 2004, when Main Building redevelopment has been completed.

14. Further reductions in land and buildings in the London area should be possible and we are drawing up a strategic development plan. We shall be considering in particular our future requirements at RAF Northolt and RAF Uxbridge and a number of other major sites in the Greater London area.

15. Elsewhere, significant estate sales now planned include parts of the Army sites at Chilwell and Woolwich; storage and support sites at Didcot, Malvern, Old Dalby, Thatcham and RAF Cardington; parts of Defence Evaluation and Research Agency sites at Bromley, Chertsey (north site) and Farnborough (Queen's Gate); and office accommodation in the Bath area. In addition, we expect to make reductions in the estate occupied by the Territorial Army in line with the reductions in its personnel numbers.

16. In total, over 350 separate sites, ranging from major establishments to small parcels of land identified as surplus, are included in the forward disposal programme. A check is made

for each site before it is put on the market to ensure that there is no suitable alternative defence use for it. Where our estate plans have significant implications for civilian staff, the Trade Unions have been or will be consulted.

17. Taken together, the planned programme of disposals will bring the total reduction in the size of our built estate in the United Kingdom since 1990 to some 20% - about the same as the percentage reduction over that period in the numbers of Service and civilian personnel based throughout the country.

18. Training Land. About two-thirds of the defence estate by area is rural training land. A shortfall in the land available to meet military training requirements had been identified before the Review began. We do not expect there to be scope for any overall reduction, but the implications of the Review for military training will now be considered in detail. Environmental appraisal will form an integral part of the process to inform our future strategy for the size and utilisation of the rural estate. Environmental and conservation groups were consulted during the Review and their views will be sought in developing our strategy. We shall also honour our existing commitments to consult with the relevant statutory bodies about changes in land use that may be proposed. The Army's Land Command continues to improve its arrangements for the efficient utilisation and management of the estate, and we are considering the scope for greater involvement of the private sector.

19. Management of the Estate. The Review identified a need for central strategic management of the defence estate, to ensure that it is managed efficiently and cost-effectively as a coherent whole; that the pressure to reduce holdings is maintained; and that we derive maximum value for money from our expenditure on property maintenance and capital works. Top level budget holders will remain individually accountable for the property that they occupy and for funding it, but the Chief Executive of the Defence Estates agency will be held accountable for the management of the estate as a whole; he will manage the disposals programme; and his team will provide an improved professional interface with industry.

20. Estate strategy will be overseen by the Defence Estates Board, chaired by the Parliamentary Under Secretary of State. The strategy will bring together forward plans; keep existing uses and utilisation of the estate under review; and enable us to identify further opportunities for disposals and for sharing between Service users. This will include concentrating smaller units on larger multi-user core sites, where cost-effective and appropriate.

Review of Stockholdings

21. Defence stockholdings have been substantially reduced in recent years:

– since 1990, £4.4Bn of stock has been sent for disposal;

- the number of individual types of item held has been cut from three to two million;
- 50 out of 81 depots have closed.

22. But stock retained totals £8Bn of missiles and ammunition, and £11Bn of other items (mainly spares and items in the repair loop). These holdings will be reviewed against the principles that stocks should be held only where they cannot be obtained within readiness preparation times for operations; and that operational stocks should not be maintained in excess of realistic operational need or deployment plans. Major savings targets have been identified through disposing of surplus stocks and improved processes to reduce the procurement of new stock:

- existing plans for review and disposal of redundant stock can be expanded and accelerated;
- flexible provisioning methods taking full account of the costs of holding stock are likely to allow more of our requirements for peacetime provisioning and for training to be met by direct supply from industry, permanently reducing our need to hold stock.

23. Against that background, a new reduction target of 20% in the book value of stockholdings (other than ammunition and missiles) over the next three years has been set. This amounts to £2.2Bn. A separate study will consider the scope for contractorisation of the management of clothing supply.

24. The market value of disposals will be slight. But stock reductions on this scale will allow further reductions in storage and distribution infrastructure (described more fully at paragraph 40).

25. **Future provisioning.** The Review considered how far savings in future provisioning could be achieved. Some stock is systematically held to cover production line inefficiencies, administrative, transport or other delays, or inaccurate provisioning calculations. We concluded that there is scope for considerable saving if radical business efficiency measures, building on plans already being developed, are introduced.

26. Much progress on these lines was already assumed in MOD's forward plans. Forward financial provision has already been reduced in anticipation of new efficiencies of this kind. But the Review nonetheless concluded that further savings would be practicable and that additional targets should be imposed.

27. **War reserves.** As a result of longer post-Cold War readiness preparation times, there is now scope for reducing holdings of war reserves such as guided weapons and ammunition. The key to reducing stocks and hence financial provision is an appreciation of the critical factors in production lead times. If new production lead times can be brought below readiness preparation time, by stocking long-lead components and materials rather than complete weapons, paying manufacturers for dormant production capability, or other partial investments, stock procurement can be reduced and economies (for example in the disposal and replacement of life-expired stocks) can be made. Studies will be conducted with industry on individual production lines as soon as practicable.

Defence Organisation

28. A series of organisational studies was undertaken during the Review, aimed at rationalisation, reduction of overheads and reinforcing joint approaches wherever this makes operational sense. These latter aspects are also considered in the essay on [joint operations](#).

29. At the highest level, we considered whether current arrangements (themselves only recently evolved from the reorganisations of the early 1990s) represent the optimum balance between single Service organisations (through which front line force elements are necessarily and rightly generated) and cross-defence structures embodying the joint approach.

30. **Joint Operations.** Building on the success of the Permanent Joint Headquarters, we have decided to enhance the role and responsibilities of the Chief of Joint Operations, including making him responsible for a top-level budget and thus putting him on the same budgetary footing as the single Service Commanders in Chief.

31. **Defence Logistics.** Careful consideration was given to our arrangements for the provision of logistics support to the front line. The current position, with three single-Service logistics organisations, ensures the necessary close relationship between the logistics area and the front-line forces it supports, but it is less well suited to maximising the scope for rationalisation and convergence on a functional, defence-wide basis. Our work also took account of the demands of operations, which are increasingly conducted on a joint basis with units of two or three Services working closely alongside each other. As a result of the Review, we have decided that:

- the three single-Service logistics organisations will be brought together into a unified organisation to provide logistic support to all three Services;
- a Chief of Defence Logistics (a four-star uniformed post) will be appointed to take overall control of the current organisations and re-configure them, after an appropriate transition period, into one integrated organisation which will, however, retain the necessary close relationship with front-line forces;

– amongst other advantages, this will facilitate the achievement of important benefits flowing from the Smart Procurement initiative across the logistics area.

32. Joint Defence Centre. A single authority will be established for the formation and development of joint and single Service doctrine, in the shape of a new Joint Defence Centre.

33. Headquarters. All these developments will have a significant impact on the Department's headquarters. This needs more time to work through. But a number of key decisions have already been taken:

– elevation of the Chief of Joint Operations to Top Level Budget Holder status will transfer some £300M of annual operating costs from the two Centre Top Level Budgets;

– the remainder will be better managed as one consolidated Top Level Budget covering all central headquarters costs, and expenditure on corporate, defence-wide services and functions which it makes sense to hold centrally. Such services range from the joint medical agencies, through the Ministry of Defence Police to pay and personnel administration;

– this will create a central Top Level Budget controlling a little over £2Bn of operating costs a year, with headquarters costs of about £170M separately identifiable within it.

34. Working through the implications of these various changes should result in a slimmer central organisation for defence, which can be accommodated after the redevelopment of the Main Building in only two London buildings. This will allow the release of one further office building, over and above previous plans.

35. Meanwhile, some small but useful staff reductions have been identified in headquarters areas such as research management, central warfare staff, environmental and health and safety policy, and information and communications services. In particular, a review of the Defence Intelligence Staff (in London and Agencies, and in their interfaces with the Commands) has identified significant savings.

36. Army Land Command Restructuring. Land Command is currently consulting on a proposal to re-shape the Army's administrative structure in the United Kingdom. The present structure was established in part to reflect the needs of military home defence, which have changed fundamentally. Land Command proposes that the current six divisions/districts would be replaced for administration purposes by three. Depending on the detailed outcome, establishment closures or reductions may result at a number of locations.

37. Territorial, Auxiliary and Volunteer Reserve Associations (TAVRAs). Following a review of the structures through which the Volunteer Reserves and Cadets are administered, a number of changes have been proposed including reduction of the number of TAVRAs from 14 to 12 to bring them into line with the Land Command brigade structure. This will require secondary legislation. These changes will produce a clearer and more coherent framework for linking the administration of Regular and Reserve forces.

Logistics

38. Much progress has been made in recent years in rationalising logistic support to the Armed Forces, often within a Defence Agency framework:

- "lead-Service" arrangements operate widely. For example, the Royal Navy procures food on behalf of all three Services;
- private sector involvement is already extensive.

39. We considered how present arrangements might be improved, to better meet the requirements of joint and force projection operations, and to take forward rationalisation and business practice improvements on a joint basis. The most significant outcome of this work was the decision to unify the three single-Service logistics organisations under a new Chief of Defence Logistics (paragraph 31 above). But a series of other important changes were also decided upon, as described below.

40. Storage and Distribution. We plan to form a single, defence- wide, storage and distribution Defence Agency in the early years of the next century:

- as a first step it is planned to form a Defence Storage and Distribution Agency (Non-explosive), on a lead-Service basis by the Quartermaster General, by April 1999. This will replace the current single-Service arrangements and should produce substantial efficiency savings;
- work on explosive storage processing and distribution, currently split between the Royal Navy and Army, recommended unifying the explosives storage function as a division of the existing Naval Bases and Supply Agency by April 1999;
- creation of the final unified organisation, to perform all storage and distribution tasks, is envisaged for 2004/05. En route, additional consideration will be given to the scope for further private sector involvement in the task.

41. We intend to consult on plans for the early closure of the Royal Navy Stores Depots at Rosyth and Colerne, and envisage that the stock reduction programme (para 22 above) should enable us to reduce storage capacity by the equivalent of a further major depot in the early years of the next decade.

42. **Fuels and Lubricants.** As a result of the work on fuels and lubricants the procurement and management of all MOD fuels and lubricants will be conducted on a lead-Service basis (by the Royal Air Force), with the exception of naval "bespoke fuels" which will initially continue to be managed separately. Fuel reserve stocks will also be significantly reduced. In addition, commercial best practice, benchmarking and other improvements to the management of fuel procurement will be adopted.

43. The Government Pipeline and Storage System (GPSS) is currently managed by the Oil and Pipeline Agency (a Non-Departmental Public Body). A study was conducted to consider the potential benefits of increased private sector involvement in utilising and managing the system. Much of this work was performed by outside consultants, who recommended greater commercial exploitation via a partnering arrangement with a major oil company and/or a long-term concession. Expressions of interest have been received. Other elements of the non-GPSS fuels infrastructure will be rationalised allowing disposals of some assets.

44. **Strategic Movements.** Large-scale movements of people and materiel are currently managed by several different staffs and authorities. Study work concluded that efficiency and effectiveness would both be improved by rationalising the relevant staffs (including the Defence Transport and Movements Executive, which currently has responsibility for land and sea movements, but not air). We therefore intend to create a Defence Transport and Movements Agency in April 1999, to be overseen by the Quartermaster General on the lead-Service principle.

45. **Commercial utilisation.** Further work explored the scope for increasing the commercial utilisation of MOD's movements infrastructure, particularly the Marchwood Military Port. Scope was identified to generate revenue within the existing operation at Marchwood, and to pursue a partnering arrangement (which might involve a commercial partner sharing in the port's operation, possibly using Sponsored Reserves - employees of the commercial partner prepared to be deployed forward to operational theatres when required).

46. **Logistics Processes and Information Technology Systems Convergence.** This study reviewed the business processes for logistic provisioning and the information systems which support them. Important progress was made on a strategy to align the business practices and IT systems of the three single-Service logistics organisations. This will underpin the other SDR logistics proposals and will be fundamental to achieving the benefits and savings of the Smart Procurement initiative (see the "[Procurement and Industry](#)" essay) and the work on stockholdings.

47. Defence Aviation Repair Agency. Major repair and overhaul of military aircraft is currently carried out by two separate Defence Agencies, one for helicopters and another for fixed-wing aircraft. As announced by the Minister for the Armed Forces on 23 April, we have decided to bring these two operations together in a single Defence Agency, the Defence Aviation Repair Agency. Given the major efficiency programmes already underway in each of the two existing Agencies, only modest overhead savings can initially be assumed. But we intend to move the new organisation to Trading Fund status as soon as possible, with the expectation of further efficiency gains from operation in a more commercial environment.

48. Army Equipment Support. The Army's head of logistic support, the Quartermaster General, is developing proposals for a major re-shaping of the Army's equipment support function. Operational, technical, contract and financial staff will be integrated to form multi-disciplinary groups managing equipment support. Reduction and relocation of staffs will be involved, as well as the absorption of the Army Technical Support Agency into the new organisation. The Army Base Repair Organisation will be restructured, with a view to moving it to Trading Fund status.

Agencies

49. Most of Defence support is now delivered through 44 Defence Agencies. A number of Agencies have achieved savings on their operating costs of over 20% in their first two or three years and several of the programmes involve rationalisation of activities from anything up to 20 sites to a single location. The Agencies are principal contributors to the Department's efficiency programme, achieving rates around double that of the rest of the Department. They also play a leading role in the development of increasingly innovative forms of Public Private Partnerships. Many of the Defence Agencies will be affected by SDR outcomes detailed above, which include the formation of new Agencies in such areas as aviation repair, strategic movements, storage and distribution and, probably, Army equipment support.

50. Agency management. In common with other Government Departments, we are developing the ways in which Agencies' output objectives are specified, to build a management environment in which the Chief Executives enjoy maximum freedom to achieve these objectives, and are fully held to account for doing so. Particular attention will be paid to this agenda in the wake of the Review, including pursuit of a campaign to recruit external advisers as non-executive members of Defence Agency Boards. A range of actions is in place to carry this forward, including the preparation of fresh guidance to Agency "owners" (the senior officials to whom, under Ministers, the Chief Executive is accountable). This will reflect the Department's experience to date. Training programmes will be redesigned to alter the focus from establishing Agencies to managing them, both internally and at the level of the Owner. Arrangements for sharing best practice have also been set in place, with a series of seminars to bring together owners, customers and Chief Executives.

51. **The Defence Evaluation and Research Agency (DERA).** DERA is MOD's largest Agency, operating as a Trading Fund with 12,500 staff and an annual turn-over of some £1Bn. We will harness the opportunities offered by a Public Private Partnership to strengthen DERA's ability to continue to provide world class scientific research well into the next century.

Conclusion

52. The Review of Support and Infrastructure has been comprehensive and far-reaching:

- the first phase of the exercise resulted in a doubling of MOD's projected future efficiency achievement;
- the Department has set itself the challenge of securing annual accumulating efficiency gains of 3% in our operating costs over the next four years; and
- major steps have been taken to increase the joint approach in the support area.

53. Achieving 3% is a challenging target which will require us to identify new efficiency gains in the years ahead in addition to the measures identified in the Review. But on the basis of the major advances identified in the Review, the target should be achievable. This planned efficiency gain is over and above the increased receipts expected from estate disposals and the efficiencies resulting from the Smart Procurement initiative, which is described in [another essay](#).

54. The introduction of commercial-style accounting will maintain the momentum imparted by the Review to the reduction and maximum utilisation of defence assets. New arrangements for the strategic management of the estate should enable us to ensure a continuing process of rationalisation and reduction in our holdings of land and buildings; and the development of our approach to the management of Defence Agencies should likewise pay continuing dividends over the years ahead.

55. The twin aims of the efficiency and assets workstage of the Strategic Defence Review were:

- to identify savings in the defence budget to help repair inherited capability deficiencies; and
- to put in place system improvements that would pay continuing dividends in the future.

56. In both respects it was successful; significant savings have been identified, and a wide

variety of improvements have been set in train which will stand the Ministry of Defence in good stead well into the next century.



STRATEGIC DEFENCE REVIEW

MODERN FORCES FOR THE MODERN WORLD

FACTSHEETS

- [*A message from the Secretary of State for Defence*](#)
 - [*The Strategic Defence Review: Modern Forces for the Modern World*](#)
 - [*A message from First Sea Lord*](#)
 - [*A message from the Chief of the General Staff*](#)
 - [*A message from the Chief of the Air Staff*](#)
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1. [Joint Rapid Reaction Forces](#)
2. [Joint Force 2000](#)
3. [Joint Helicopter Command](#)
4. [Ground Based Air Defence](#)
5. [Land-based Nuclear, Biological & Chemical Defence](#)
6. [Strategic Transport](#)
7. [Joint Defence Centre](#)

8. [Defence Diplomacy](#)
9. [The Future of the Reserves](#)
10. [Territorial Auxiliary & Volunteer Reserve Associations \(TAVRAs\) and Cadets](#)
11. [Chief of Defence Logistics](#)
12. [Defence Logistics](#)
13. [Defence Medical Services](#)
14. [Defence Agencies](#)
15. [Procurement Executive](#)
16. [Changes in Defence Procurement](#)
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People

19. [Policy for People](#)
20. [Impact on Civilian Staff](#)

Royal Navy

21. [A new operational concept for the Navy](#)
22. [Nuclear Deterrent](#)

23. [Future Aircraft Carriers](#)
24. [Naval Aviation](#)
25. [Commando Brigade and Amphibious Shipping](#)
26. [Attack Submarines](#)
27. [Destroyers and Frigates](#)
28. [Mine Countermeasures Vessels](#)
29. [Fishery Protection](#)
30. [Naval Support](#)

Army

31. [The Post-SDR Structure of Deployable Divisions](#)
32. [Joint Rapid Reaction Force - Land Assigned Forces](#)
33. [The Army in Germany](#)
34. [Royal Armoured Corps](#)
35. [Infantry](#)
36. [Army Aviation](#)
37. [Changes to Regular Army Combat Support](#)
38. [Changes to Army Combat Service Support](#)
39. [Changes to the Territorial Army](#)

40. [Army District Organisation in the UK](#)

Royal Air Force

41. [Fast Jet Combat Aircraft Numbers](#)

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Factsheets

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STRATEGIC DEFENCE REVIEW

MESSAGE FROM
THE SECRETARY OF STATE FOR DEFENCE
THE Rt. Hon. GEORGE ROBERTSON MP



The Strategic Defence Review has been a uniquely open re-examination of Britain's defence requirements from first principles. Our aim has been to build on our strengths, remedy our weaknesses, and provide a framework for defence into the 21st century.

More than anything else, the Review has confirmed my conviction that effective defence depends fundamentally on people. It depends on the three hundred thousand military and civilian employees of the Ministry of Defence. Throughout the Review I have therefore been determined to ensure that the Armed Forces, the civilians who support them, and their families should be kept informed about its conduct. Now that the Review has reached its conclusions, I am equally determined that they should be told about its outcome as rapidly and fully as possible.

This pack of fact sheets forms a key component of that process. They should be used as the basis upon which commanders and managers discharge their obligation to explain the outcome of the Review to their staff.

These fact sheets can only go so far. Much work needs to be done to implement our conclusions. Although we have tried to answer all of the questions that people will ask, in some areas the implications will not become clear until that work has been completed. Where that is

the case, we have been frank and said so.

The Strategic Defence Review provides a coherent long term vision for Britain's defence and the people who work in it. I firmly believe that it represents a good outcome for the Armed Forces, for defence, and the nation as a whole.

A handwritten signature in black ink, appearing to read "George Robertson". The signature is written in a cursive, flowing style with a prominent initial "G".

Ministry of Defence
July 1998





STRATEGIC DEFENCE REVIEW

MODERN FORCES FOR THE MODERN WORLD

The Strategic Defence Review is a necessary response to a changing world. It has been an unprecedentedly open re-examination of British defence requirements from first principles by a Government committed to providing strong and modern defence in support of an active foreign policy. We have taken advantage of the widest possible range of experience and views, in the Armed Forces and beyond. The result has been a Review that should set a course for British defence well into the 21st century. Its main themes are designed to be flexible and robust against a range of eventualities. At its heart are high capability, usable, cost-effective and, above all, battlewinning Armed Forces, based on highly skilled and highly motivated people.

Britain's Security and Interests

The Government's first priority must be to ensure peace, freedom and prosperity for the United Kingdom and its people. But a modern, forward looking country cannot afford to be isolationist:

- our peace and freedom rest on European security, and hence on NATO;
- our prosperity rests on international trade and stability;
- we have responsibilities as a leading member of the international community, and a collective obligation to those whose condition is much worse than our own, to help promote peace, freedom and prosperity worldwide.

Britain must therefore be a force for good in the world.

The end of the Cold War made Britain safer. But it did not solve the world's security problems. Regional risks, such as that posed by Saddam Hussein, still exist. Instability including ethnic tensions and border disputes, is causing widespread suffering in Europe and beyond, and could eventually recreate a major direct threat to our security. And new problems are emerging, such as:

- the proliferation of nuclear, chemical and biological weapons;

- terrorism and drug-related crime;
- environmental damage;
- vulnerability to technological dislocation and attack.

Yet although the post-Cold War world is complex and unpredictable, it also presents new opportunities to prevent and manage crises, to stop them escalating into conflict. We must seize these opportunities.

The Role of Defence

In Europe and beyond, the Armed Forces can play a much greater part in reinforcing our long term security by helping to build international trust and prevent conflict. Defence diplomacy activities, such as helping the new democracies in Europe to reform their armed forces, are an important priority in the modern world.

To support Britain's interests and discharge our responsibilities into the next century, our Armed Forces must be flexible. We will be working to strengthen the United Nations in peace support and humanitarian operations, and we will make more of our forces potentially available in this role. But to deter, and if deterrence fails to win, our forces must be able to fight successfully in the most difficult circumstances against the toughest opponents. And experience shows that by being the best in combat, our forces have the skills and capabilities to be the best peacekeepers as well.

Our planning must look beyond today's crises to provide insurance against the possibility, however remote it seems now, that Britain might once again face a major direct threat. We must be able to build up our forces in such circumstances. And while large nuclear arsenals and serious proliferation risks remain, our Trident nuclear deterrent must be part of this essential insurance. We are, however, absolutely committed to progress on arms control and we will be putting our principles into practice by:

- making significant reductions in our nuclear weapons so that we have no more than we need for credible deterrence;
- relaxing our day-to-day operating posture to reflect the current strategic background;
- being much more open about Trident and other nuclear issues.

Military Capability

At the heart of this radical and far-reaching Review is the creation of modern, high capability conventional forces. They must be able to meet our present commitments and adapt to evolving requirements if the international climate changes. They must be manned, equipped, trained and sustained for modern warfare. Operations are likely to be multinational and involve the deployment of forces over considerable distances, often without local infrastructure and other support.

To meet these challenges, we will modernise the Armed Forces by:

- creating a pool of Joint Rapid Reaction Forces drawn from all three Services to provide a quickly deployable and militarily powerful cutting edge in crises of all kinds;
- introducing a range of new capabilities such as larger aircraft carriers, an air manoeuvre brigade and improved nuclear, biological and chemical defence;
- providing our forces with the improved strategic transport, logistic and medical support, and deployable headquarters and communications they need to mount and, if necessary, sustain operations successfully;
- developing further the integrated or joint-Service approach to defence, both in the front line and support areas, to generate the maximum military capability from the combined resources of the three Services. Initiatives will include a joint helicopter command, the "Joint Force 2000" concept for Royal Navy and RAF carrier-based operations, and an enhanced role and responsibilities for the Chief of Joint Operations;
- rebalance our front line, in the United Kingdom and Germany, to match today's priorities and to ensure that it is properly manned;
- include for the first time our Reserve Forces fully in the process of post-Cold War modernisation. The Territorial Army will be given a relevant and useful role for today, and the tools and training to undertake it.

This is an ambitious programme. The size of our Regular forces will not change significantly; indeed, the Army will be bigger. We will, however, reconfigure our forces and this will involve changes in the balance of capabilities, with improvements in some areas and reductions in others, including in the overall size of the revitalised Territorial Army. The result will be a modern force structure to meet 21st century challenges.

People

Effective defence depends on well-trained, highly skilled and highly motivated people. People have therefore been at the very centre of this Review. Our long term personnel strategies

include a range of initiatives to improve the attractiveness of Service and civilian careers, especially through training and development. We are tackling the problem of overstretch. The Review envisages a fully manned force structure which is matched to what we plan to be able to do. Our plans include:

- increases in the size of the Armed Forces where our people are being asked to do too much and changes in organisation to spread the load of operational commitments more sensibly;
- an increased recruiting effort, with particular emphasis on attracting good candidates from among the ethnic minorities and women;
- a major education and training initiative linked to the Learning Age initiative to encourage recruiting and retention;
- a task force to address the special problems faced by Service families and a unit for Veterans' affairs.

Equipment

Modern forces need effective high-capability equipment. The Strategic Defence Review has re-examined the equipment programme to establish what we need today and in the longer term. Key projects such as Eurofighter, the Apache attack helicopter and the Horizon frigate have been confirmed, and new requirements have been identified, including strategic air and sea transport, and the new generation of aircraft carriers. And because systems now being developed will transform the way in which battles are fought, we will invest sensibly to give our forces a decisive technological advantage in key battlewinning areas.

Smart Procurement

This is why the Government is committed to a strong and healthy defence industry in Britain and Europe. But the Ministry of Defence has often been unable to take full advantage of what industry can offer. Only a radical reappraisal of the way in which we procure equipment could hope to solve the problems of delayed and over-budget projects. With the help of industry and outside consultants we have produced a new approach - "Smart Procurement" - that cuts out bureaucracy, reduces the time taken to procure weapons and cuts costs. The Smart Procurement Initiative will take time to realise but we will get better value for money and operational advantages as a result.

Modern Support

The Review has also taken a radical approach to support, building on previous work on

efficiency and innovation. Comprehensive examinations of stockholdings and the defence estate have identified major savings. Joint Service integration will be expanded significantly, including by the creation of a Chief of Defence Logistics. And there are many areas in which organisational change, based on experience not dogma, can produce major improvements.

Affordability

This has been a policy-led Review. But for our plans to be effective they must be affordable, and the public must see that we are spending money sensibly. Balancing the books has not been easy but our work has produced impressive results. In the new strategic environment we will be able to provide the modern and militarily effective Armed Forces that Britain needs more cost-effectively.

Modern Forces for the Modern World

The Strategic Defence Review puts into effect the Government's commitment to strong, modern defence for Britain. It builds on the strengths and successes of our Armed Forces, rectifies their inherited weaknesses and modernises their capabilities so that they can deal with new challenges in a changing world. It places the people on whom our defence depends firmly at the centre of our planning. And it gives defence a clear sense of direction as a vital means of protecting Britain's interests, discharging our responsibilities and acting as a real force for good. The Review is therefore good for Britain, good for defence and good for the Armed Forces. It will give us the modern forces we need for the modern world.



STRATEGIC DEFENCE REVIEW

MESSAGE FROM THE FIRST SEA LORD

The Strategic Defence Review was set up last year to ensure that Britain's Armed Forces are shaped to meet the demands of the 21st century. The Review is now complete and I wanted to set out my personal view of what it means for the Royal Navy.

We have emerged from the Review with a much more clearly defined concept of operations, a plan for a powerful and balanced front line, increased funding for some aspects of support and a strategy for dealing with the problems of activity overstretch which have plagued us over the last few years. There will be some changes of emphasis. These reflect the Review's assessment of the forces we need to support the Government's foreign and security policy, and its strategic priorities, including some reductions in the front line which will inevitably be painful. Overall, however, the future plans for the Royal Navy and Royal Marines are entirely appropriate to take us into the 21st century.

Concept of Operations

During the Cold War the fundamental strategic assumption was that the enemy would come to us. In today's uncertain world, crises and threats to British interests can occur anywhere and we need joint, versatile and readily deployable forces which can respond quickly to them.

The contribution maritime forces can make is crucial and has been recognised in the Review. We must be able to undertake operations away from home in conjunction with the other Services and in cooperation with our Allies. Our major role in the Joint Rapid Reaction Forces exemplifies this, and other initiatives such as the development of an RN/RAF Joint Fixed Wing Force and the Joint Helicopter Command for battlefield helicopters will enhance the part we will play in future operations.

The Front Line

The Review has examined every aspect of the Navy's front line thoroughly and has called for some adjustments. The outcome of the biggest single debate in the Review is that we intend to replace our current CVSs with two larger aircraft carriers. They will be capable of operating fixed wing aircraft from the Royal Navy and the Royal Air Force, and helicopters from all three

Services. Such a capability is particularly relevant to the demands of the next century, and this decision is of the greatest significance for the Royal Navy.

Further good news is the endorsement of a brigade sized amphibious force. In addition to HMS OCEAN, the two replacement LPDs, ALBION and BULWARK, and two replacement LSLs, a further four RoRo ships are to be added to the two RoRos that will be in service this year. This will be a truly impressive capability and will give us the sea lift which, together with improved heavy airlift, will enable us to move quickly and deploy tactically leading elements of the Joint Rapid Reaction Forces.

We will maintain continuous at sea nuclear deterrence with a force of four SSBNs, as we have for the last 30 years. Furthermore, all Trafalgar Class submarines will be capable of firing Tomahawk land attack missiles, thereby extending our ability to apply pressure in times of tension and our power to influence events up to 1,000 miles inland.

These enhancements are all good for the Navy. However, reflecting the change in emphasis across defence, we will reduce over time from 12 to 10 attack submarines, although the orders for three Astute Class and plans for a further two have been confirmed. We will also reduce from 35 destroyers and frigates to 32, and we will now increase the mine warfare force from the current 19 vessels to 22, rather than the previously planned 25. Furthermore, the total number of anti-submarine warfare Merlin helicopters will not be increased beyond the 44 already on order, although more Lynx helicopters will be converted to Mark 8 standard to ensure we maintain helicopter flights on all operational destroyers and frigates.

Future Equipment and Support

The Review has endorsed the Royal Navy's strategy to maintain a balanced Fleet in the years ahead. To realise that strategy we are going to sharpen up the way we buy equipment and spares and how we support and update our ships and equipment throughout their life.

In another major initiative, Ministers have decided to create a Chief of Defence Logistics. The aim is to bring together over the next two years the three single Service support commands under one organisation, to deliver best practice, avoid duplication and improve support to joint operations. No change of this magnitude can happen without some upheaval, but we must build on the good progress we have already made in tri-Service support rationalisation and within the Naval Support Command, and aim to realise further long term benefits from a single structure.

Much work has been done to identify and progressively put right logistics shortfalls in all three Services, especially with respect to our ability to deploy overseas. For the Navy this includes funding to address shortfalls in our weapon stocks. The Medical Services were recognised as a particular area of under- funding and a number of measures including a new 200 bed

Primary Casualty Receiving Ship, increased medical recruiting, new equipment and improved medical support for operations, highlight the determination of Ministers to rectify the problems.

People

Finally, but most importantly, one of the Secretary of State's key aims in the Review has been to put people first. At each stage of the Review the impact on people has been assessed. Ministers are determined to tackle overstretch and unmanned complement billets, and so am I.

An example of this is our intention to adopt a much more flexible approach to programming ships and submarines to match our commitments and resources. We are shortly to introduce alternative arrangements for deploying our destroyers and frigates to the South Atlantic, the West Indies and in the Gulf, so as to reduce the overstretch involved while still providing a strong presence in all three areas. We have also decided to make changes to the attack submarine operational programme. The result will be that fewer ships and submarines will be called for to meet our tasks. Thus despite the reduction in hulls, the overall effect will be to ease the strain on the Fleet programme.

The reduction in destroyer, frigate and attack submarine hulls will allow us to redeploy some personnel, thus going some way in the short term towards easing gapping until the benefits of the improved recruiting and retention measures that are already in place bear fruit. There will be no requirement for a redundancy scheme as a result of the review, although there may be a limited need to target certain specialist categories on a voluntary basis.

Turning to both RN and RM Reserves, I welcome the substantial increase in the number of training days and, for the RNR, a useful increase of 350 personnel who may now be recruited.

The Review has placed a clear emphasis on providing practical help to servicemen and women including schemes to improve in-service education opportunities and the establishment of a Families Task Force to tackle some of the problems Service families can face. An initiative is also being pursued to provide better single living accommodation.

It would be wrong of me to raise expectations of quick fixes because results will take time to materialise, but it is quite clear to me that Ministers are determined to improve the lot of our people.

Summary

The Strategic Defence Review has been a rigorous and comprehensive analysis of the role of the country's Armed Forces and how that role should be carried out. In our case, the task for the Royal Navy and Royal Marines is clearly set out. The plans stand us in good stead and ensure that we remain one of the most powerful and effective navies in the world.

Jock Slater

Admiral Sir Jock Slater
First Sea Lord



STRATEGIC DEFENCE REVIEW

MESSAGE FROM THE CHIEF OF THE GENERAL STAFF

The Government's Strategic Defence Review - the SDR - is now complete and I write to ensure that you and all those under your command understand the major issues and how they will influence the Army.

We entered the Review unable to properly meet our commitments and readiness requirements, with significant imbalance in both our Regular and Reserve orbats. Following the Review, I am optimistic that the Army will be considerably better placed to respond to the broad spectrum of security risks inherent in the post-Cold War world. The provision of responsive, well-trained, deployable and suitably equipped forces is the key product of the Review.

My principal goal has always been to preserve, and where possible enhance, the Army's capability across the whole spectrum of conflict, but particularly in high intensity conflict, and the SDR has recognised the importance of this. Our role as the framework nation within the ACE Rapid Reaction Corps (ARRC), providing the headquarters, communications and key corps troops, is vital, preserves our expertise at the operational level, and brings with it considerable influence in NATO. But that influence ultimately rests upon the fighting power that we bring to the Alliance.

The underlying assumption in the SDR calls for us to be able to deploy a brigade quickly as part of the new Joint Rapid Reaction Forces (or JRRF), to be able to mount two brigade-sized operations concurrently (and to sustain one of them indefinitely), to deploy a warfighting division for operations such as the Gulf War, and to maintain our overall contribution to NATO. To meet these requirements whilst still meeting our other commitments in peacetime we have developed a structure for the Army comprising two deployable divisions at realistic peace establishment, each of three brigades rotating through a three-year formation readiness cycle (the successor to our current formation training plot). To achieve this we need to form a sixth mechanized brigade and an additional armoured reconnaissance regiment. Once complete, these changes will enable the Army to meet the readiness levels demanded by the Review and fulfil its many other tasks in a coherent, balanced and sustainable way.

The revised training and operational cycle will be the key to meeting JRRF readiness

requirements and at the same time restoring balance to the lives of our officers, soldiers and their families. Rotating the deployable brigades through a cycle of a year spent on primary role training, followed by a year at high readiness and in support of training, followed by a year on other tasks (such as deployments to Northern Ireland, Cyprus and Bosnia), should produce the balance and stability that is lacking at present.

Our capability will also be enhanced by retaining the utility but increasing the potency of airborne forces. We will brigade all our 'air-minded' forces, by embedding the smaller in-role parachute forces in a new air manoeuvre formation, together with the three aviation regiments that will be equipped with the Apache Longbow attack helicopter. This will have a number of advantages: the early entry capability of the Lead Parachute Battalion Group, combined arms support to complement the attack helicopter, and greatly increased tactical mobility and firepower in-theatre for parachute forces.

We are also improving the Army beyond the 'shop window' by reducing the gaps and risks that exist in our sustainability. To meet the SDR requirement to be able to conduct two brigade size deployments concurrently, we will establish a full second line of communication for which, amongst other improvements, we shall be adding some 3300 additional Regular personnel to the Army orbat. This will improve the tour interval significantly for some of our most heavily committed logistic units and personnel.

There are other significant changes proposed for the support area. The introduction of a Chief of Defence Logistics will bring together QMG and the other two single Service support commands into one organization in order to deliver best practice and to gain economies of scale. The supply and distribution agencies, as well as the strategic movements organizations, will be rationalized. In parallel, the implementation of the Smart Procurement Initiative, a reorganisation of the procurement organisation, will provide a clearer focus to managing support throughout the whole life of equipment.

The SDR has recognized the fundamental importance of the TA. It has also highlighted the need to modernise its structure in step with changes to the Regular Army - to meet the demands of the new strategic environment with a greater emphasis on force projection. Rapid reaction forces need high readiness reserves, particularly individuals properly trained at short notice to join Regular units. We will also need to be prepared to call out complete TA units, both when a war fighting division is required and, especially in the case of medical units, in less demanding circumstances. We are in addition examining the concept of using 'sponsored reserves' whereby support services, contracted out to commerce and industry in peace, would include some reserve liability to ensure that uniformed military support is provided in time of crisis or war.

One of the recurring themes of the SDR has been the emphasis on increasing the joint dimension of training and operations, particularly where it improves operational effectiveness

and flexibility and removes unnecessary duplication. A joint helicopter force, centralized crew training for Rapier FSC crew and a joint air defence headquarters, and a joint Army / RAF NBC defence organisation all present opportunities for significant improvements in defence capability, and better ways of providing operational support to the deployed Army. But we need to distinguish between jointery where it makes sense and a uniform approach for its own sake. Where there are important differences between the Services, because of the way in which we fight, they will remain.

The Army that will emerge from the SDR will be better trained and more able to meet the readiness requirements of future operations. The formation readiness cycle should improve stability; it will be backed up by improved sustainability and a reserve component better matched to its tasks. Our continuing deployment in Germany will underpin leadership of the ARRC, through which we gain invaluable operational experience, whilst the return of some armoured units as part of the restructuring to achieve the sixth mechanised brigade will produce a better balance of opportunity for service in UK for those elements. Our range of capabilities from light, early entry forces through heavier components of the JRRF, to a full warfighting capability including Corps troops and backed up by appropriate reserve forces, should enable the Army to remain the best, most usable small army in the world.

The SDR will not bring a reduction in commitments nor a large increase in the size of the Army, which we could not sustain, but instead, a real improvement in the way we deliver our fighting power. We should be able to implement the organisational changes necessary to meet key readiness targets within the first few years, but improvements in manning and sustainability will take longer. Implementation will be phased, so that whilst we reorganize we can still prepare for and carry out operations.

Throughout the Review the needs of all our people including families have been a primary consideration. This is reflected in the emphasis it places on providing a rewarding career with improved vocational training. The improved balance that the new formation readiness cycle will bring should produce an improvement to the quality of life in the Army and so lead to better retention. The measures introduced to improve recruiting have already resulted in an increase in the numbers undergoing training and I am confident that this programme will be sustained. The combination of more recruits and better retention should result in a significant reduction in the widespread overstretch with which the Army contends today.

I believe that the outcome of the SDR for the Army is good, although I fully realise that there will be some disruption and instability caused by the necessary reorganisation. The SDR is another phase of the continuing process of change in our country. We should seize the opportunities with which it presents us, but not be daunted by the challenges. Above all we must all ensure that we preserve our ethos and our warfighting capability.



Sir Roger Wheeler
General

Chief of the General Staff



STRATEGIC DEFENCE REVIEW

MESSAGE FROM CHIEF OF AIR STAFF

The Government's Strategic Defence Review has reached its conclusion and the decisions are contained in the White Paper which is being published by the Government. You will be aware that the SDR was a foreign and security policy-led Review, and that the aim was to define the missions required of the UK's Armed Forces and to identify the force packages necessary to achieve them.

As we approach the end of a turbulent decade for the RAF, the SDR set a demanding challenge. The staffs in MOD and the Commands were required to examine all aspects of our contemporary and complex activities and to recommend how they could be best developed in the future. The SDR thus presented me with a real opportunity to influence the direction of future investment, albeit finding headroom to finance new initiatives so as to rectify defence weaknesses has involved some difficult decisions.

In the context of force structures, the clear aim was to develop the required capabilities to meet the Government's foreign and security objectives. Jointery, deployability and sustainability emerged from the SDR process as themes that focused the search for improved flexibility and operational effectiveness, both necessary to meet the demands of the new strategic environment which is fraught with uncertainty. For our part, we contributed to all aspects of the debate by introducing the hard-earned lessons of operational experience to the deliberations of the committees and working groups engaged on SDR business.

I have given my full support to all initiatives which address overstretch, undermanning, education and welfare issues. There will be no redundancies in the RAF as a consequence of SDR, and, in overall terms, RAF core manning should be in balance within two years, although I acknowledge that some areas will remain in deficit for longer. In particular, the 'Policy for People' package puts clear emphasis on providing practical help to servicemen and women. Education and training, vocational and academic, will underpin the RAF's commitment to investing in people. Other initiatives are intended to ensure that RAF personnel and their families remain attracted to service-life and, importantly, that they will not be disadvantaged when they return to the civilian employment market.

New equipment is planned for the RAF that will see us well equipped for the challenges of the

future. Some of the key issues are outlined below:

Equipment: Eurofighter remains the cornerstone of the RAF's future equipment programme and I welcome the Government's commitment to the purchase of 232 aircraft. Studies will continue into a Future Offensive Air System to replace the Tornado GR4 in about twenty years' time. It is planned that the RAF will share with the RN the operation of a single aircraft (the Future Carrier Borne Aircraft) to replace the Sea Harrier and Harrier GR7, for which the Joint Strike Fighter will be a strong contender. A collision warning system will be procured for the Tornado GR4 and the Joint Tactical Information Distribution System will be fitted to Nimrod R. All of these measures represent a considerable enhancement to our present capabilities.

Nuclear, biological and chemical defence: increased investment will be made available for new equipment which will include an additional buy of integrated biological detection systems and remote sensors, nuclear/chemical recce systems, vaccines and antibiotic packs, and medium scale decontamination equipment packs.

Strategic Lift: we intend, in the short term, to supplement our current air transport fleet with four C-17 aircraft or their equivalent. In the longer term, we also need to consider a suitable replacement for our remaining elderly transport aircraft. The Future Large Aircraft will be a contender for this requirement.

Logistics: there will be a significantly increased investment in logistics for the RAF. The main areas for investment are vehicles for fuel and transportation, Harrier GR7 and Tornado GR1/4 deployment packs, additional support manpower, engine and avionic spares packages, portable engineering and hangar accommodation, and additional support helicopter tactical fuel vehicles. In addition, the Tactical Communications Wing will be expanded. It is also proposed to unify the management of logistic support to all three services under a joint Chief of Defence Logistics, whose mission will be to drive forward rationalisation and convergence in the logistic arena.

Medical: there will also be additional resources to make radical improvements in RAF medical services. The provision of primary health care will be enhanced, and medical support to all deployed operations should be improved significantly.

Manpower: regular RAF manpower should be in balance once SDR is fully implemented and approximately 270 new reservist posts will be created.

A key SDR theme is 'jointery'. The prime initiatives will be the creation of Joint Rapid Reaction Forces, which will build on the current Joint Rapid Deployment force and encompass all high readiness forces; and the formation of a Joint Helicopter Command, which will draw together all RN, Army and RAF battlefield helicopters. The implementation officer and first commander of the Joint Helicopter Command will be an RAF two-star officer. We will, in conjunction with

the Royal Navy, progress towards the formation of a RAF/RN joint fixed wing force. The Joint Force 2000, as it will be known, is the first step towards the goal of operating a common aircraft from land and from the future aircraft carriers. Future Rapier Field Standard C training for RAF and Army personnel will be conducted at RAF Honington and we intend to move towards a joint Ground Based Air Defence force, to be up and running when the Army and the RAF Regiment have common equipment. A joint NBC unit will also be formed which will lead to an establishment increase of 75 RAF personnel.

There will, however, be a reduction in fast jet numbers which reflects calculations of the number of airframes and crews needed to meet revised planning assumptions. It also takes into account the weight of effort likely to be necessary to accomplish a task and assumptions about the number of tasks which we might need to undertake concurrently. Twelve Tornado GR1s will be removed from the front line, a measure also necessary to enable the GR1/4 force to reach its out of service date, together with nine Harriers, thirteen Tornado F3 and two Jaguars. These reductions will result in the disbandment of one F3 and one GR1 squadron. It is anticipated that the Tornado GR1/4 will lose its anti-shipping role, but this does not imply any further reduction in airframe numbers.

The RAF's activities and plans have been thoroughly scrutinised within the SDR process, and while I very much regret the need to remove 36 fast jets from the front line, I do welcome the fact that we have avoided any redundancies which, along with other measures, will help to alleviate overstretch, and improve both logistic support and the quality of life for all ranks of the Service.

Throughout the lengthy process of SDR debate, my hand was greatly strengthened by the sheer excellence of the RAF's response to operational demands since the end of the Cold War - demands that have been always answered despite the turbulence and trauma caused by rapid reductions in the uniformed strength of the Service and major restructuring as a consequence of Options for Change and the Defence Costs Studies. In the early months of this year the RAF was sustaining six operational deployments and demonstrating the potency of air power with impressive skill and no small measure of courage. My delight in the Service and its accomplishments, your accomplishments, gave me strength and encouragement throughout the SDR, and I do hope you will agree that we now have a platform from which we can face the future with confidence and shared pride in our Service.

A handwritten signature in black ink that reads "Richard Johns". The signature is written in a cursive style with a horizontal line underneath the name.

Air Chief Marshal Sir Richard Johns
Chief of the Air Staff



JOINT RAPID REACTION FORCES

- **Future operations will place greater emphasis on projecting military force rapidly and over long distances. In this new strategic environment our Armed Forces require a powerful and deployable cutting edge based on improved interoperability between the Services.**
- Our current rapid deployment capability falls short of this in a number of key respects:
 - it has insufficient combat power for more demanding operations;
 - it has inadequate logistic and medical support for simultaneous or prolonged deployments;
 - it needs better command and control arrangements.
- **To meet this challenge, the Joint Rapid Deployment Force will be developed into a more substantial pool of capabilities, composed of all our readily available forces, to be known as the Joint Rapid Reaction Forces (JRRF).**
- From this pool, tailored force packages of up to brigade level or equivalent for operations on land, sea and air can be assembled and deployed quickly to protect our interests, meet our commitments and discharge our responsibilities.
- The JRRF will have real punch and protection, and will be able to undertake operations of all kinds up to and including modern warfare against the most demanding opponents.
- Unlike the current Joint Rapid Deployment Force, the JRRF will be used to undertake all of our short-notice joint operations, including our NATO commitments. It can also provide the leading elements of deployments at larger than brigade or equivalent level.
- This means:

- all deployable high readiness forces will form part of the JRRF;
- considerable investment in strategic lift to deploy and support substantial military forces, at short notice. In the short term, we plan to acquire an additional four roll-on roll-off container ships and four large C-17 aircraft or their equivalent;
- enhanced logistic and medical support;
- improved command and control arrangements. We will increase the staff available to plan and execute the early stages of an operation;
- improved arrangements for joint training.

- We will achieve this by:

- some re-organisation in each Service, especially the Army (see [the fact sheet on JRRF Land Assigned Forces](#));
- a rapid implementation process led by the Chief of Joint Operations and his staff at the Permanent Joint Headquarters, in conjunction with the single Service Commanders-in-Chief.

- The Permanent Joint Headquarters will play a central role in the operational command of our high readiness forces and will test the JRRF in the largest joint exercise for years (FTX 2001 in Oman in 2001). This will employ many of the JRRF capabilities, including maritime, land, amphibious and air elements, strategic lift and logistic support. A new two-star post, the Chief of Joint Force Operations and Training, will be established to assist the Chief of Joint Operations in his enhanced responsibilities.

- The Joint Rapid Reaction Forces will:

- **offer a new approach, designed to improve the effectiveness and joint warfare capability of our Armed Forces. Our ability to react with the right forces at the right readiness, in joint force packages, will be greatly improved as a result;**
 - **ensure that when we need to deploy to meet an urgent operational challenge, we do so quickly, well supported and trained to fight in a joint warfare environment alongside our Allies.**
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JOINT FORCE 2000

- **Joint Force 2000 is a joint initiative between the RN and RAF which aims to build on the considerable success in operating both Navy Sea Harrier FA2s and RAF Harrier GR7s in joint carrier air groups.**
- Aircraft carriers have a key role to play in joint force projection operations. This is explained in detail in the [fact sheet on the Future Aircraft Carrier](#).
- In order to provide a deployable and effective offensive air capability, we will need a modern and flexible air group equally at home operating from bases ashore or from the future carrier.
- **Joint Force 2000 is a concept for a joint RN/RAF force to be established from around the middle of the next decade. The force is planned to operate a common aircraft type which will be a replacement for the Sea Harrier FA2 and Harrier GR7.**
- We plan to achieve this by:
 - building on the success of current joint Harrier operations and gradually merging RN and RAF Harrier culture and practices towards a properly joint force, capable of land attack and air defence operations;
 - replacing both the Sea Harrier FA2 and the Harrier GR7 with a new aircraft, currently designated as the Future Carrier Borne Aircraft, starting around the end of the next decade. A range of aircraft options remain, but we shall continue to participate in the concept demonstration phase of the US Joint Strike Fighter programme, which is a strong contender to meet our requirement.
- A Joint Force 2000 study team is being formed to propose the changes necessary to move from the present day towards the future joint force. The study team will examine:
 - closer integration and basing of the current Harrier fleets as a prerequisite for Joint Force 2000;

- the opportunities for greater exchange of personnel between the RN and RAF Harrier communities;
- possible convergence between the differing RN and RAF engineering trade structures;
- the size and structure of the Joint Force 2000 headquarters and organisation, and the timescale for putting it in place.

- Joint Force 2000 represents a radical initiative to form a truly joint, flexible and deployable force ideally suited to the demands of the new strategic environment. It will help ensure that we derive maximum operational and cost benefit from our Harrier replacement aircraft and our future aircraft carriers.



JOINT HELICOPTER COMMAND

- **The SDR acknowledged that the battlefield helicopters owned by all three Services are essential assets in the new strategic environment. But we need to maximise their effectiveness across defence as a whole.**
- **To achieve this, it has been decided to create a new Joint Helicopter Command. It will bring together the Navy's commando helicopters, the Army's attack and light utility helicopters, and the RAF's support helicopters.**
- This will be a joint, tri-Service organisation. People will remain part of their current parent Service, including for the purposes of career management.
- At this stage, only outline plans for the Joint Helicopter Command have been agreed. Under these proposals, it will:
 - be commanded by a tri-Service rotational two star commander under the operational command and budgetary control of Headquarters Land Command;
 - cover battlefield helicopters only. RN anti-surface warfare, anti-submarine warfare and airborne early warning helicopters, and RN and RAF search and rescue helicopters, are therefore not included;
 - look for best practice across the three Services in order to gain greater efficiencies in training and operating battlefield helicopters.
- A Joint Helicopter Command Study Team has been established to consult widely and to examine, by the autumn, the following detailed issues:
 - the best location for the Command Headquarters. Options are Yeovilton, Netheravon, Wilton and Benson;
 - the structure and size of the Command, and detailed command and control

arrangements;

- linkages between peacetime command and operations;
- the boundaries of budgetary authority;
- arrangements for engineering and logistic support;
- delegations and responsibilities for flight safety, air worthiness, accident investigation, duty of care, performance standards and tasking.

- This is one of the most important initiatives in the SDR. It reinforces the role of our joint battlefield helicopter fleets at the heart of Britain's defence capability.



GROUND-BASED AIR DEFENCE

- With the SDR's emphasis on deployability and flexibility, Rapier and the High Velocity Missile (Starstreak) ground based air defence systems are key elements of our overall air defence capability.
- The Army currently operates a mixture of Rapier Field Standard B and C systems, and the Starstreak high velocity missile; the RAF Regiment operates Rapier Field Standard C.
- A degree of commonality and coordination exists between Army and RAF Rapier units, but full interoperability between the two Services has been hindered by differences in equipment, procedures and training.
- **To derive the maximum operational benefit from new equipment coming into service, and improve overall cost-effectiveness, a joint Army / RAF ground based air defence organisation will be formed. It will ultimately operate common Rapier equipment with common procedures, standards and support.**
- We will achieve this by:
 - continuing existing plans to introduce Rapier Field Standard C into service to replace all Field Standard B systems;
 - establishing a joint training school for Rapier Field Standard C at RAF Honington by 1 April 1999 (Field Standard B and Starstreak training will remain with the Army at Larkhill);
 - continuing with plans to bring into service a range of command, control and communications equipment that will allow greater coordination and the sharing of air defence tasks;
 - establishing a joint headquarters for ground based air defence by 2002. Its exact size, structure and location will be subject to further detailed study.

- The Army will continue to operate the high velocity missile system.

- A joint ground based air defence headquarters and organisation will help ensure that, through full interoperability and the sharing of air defence tasks, we make the most efficient and effective use of our ground based air defence equipment.



LAND-BASED NUCLEAR, BIOLOGICAL AND CHEMICAL DEFENCES

- Although the threat of direct use of nuclear weapons against Britain has diminished since the end of the Cold War, more nations are gaining a military nuclear capability. And the proliferation of biological and chemical weapons programmes presents a continuing threat to our deployed forces. The SDR has therefore placed great emphasis on providing the Armed Forces with modern and effective nuclear, biological and chemical (NBC) defences.
 - Recent operations, particularly in the Gulf, have confirmed the need for an improved joint land-based NBC defence capability as an integral part of our readily available forces.
 - New NBC capabilities are being developed and current capabilities reconfigured within the Army and RAF to equip our forces better for the more varied roles anticipated in the SDR.
 - **To ensure that these capabilities are as effective as possible, we will develop a joint Army/RAF structure to operate them. We therefore plan to establish a joint Army / RAF NBC defence unit, which will provide an operational capability in NBC detection, reconnaissance and survey.**
 - This unit will deliver a NBC defence capability at high and very high states of readiness for deployment on operations. It will also maximise joint training opportunities, build on current single Service expertise and establish joint performance standards.
 - The unit will comprise both Regular and Reserve components, which it will integrate to provide a high degree of operational capability across a broad range of readiness states.
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STRATEGIC TRANSPORT

- **The ability to rapidly deploy, sustain and recover our forces is of critical importance if we are to be able to respond quickly to future crises.**
- A mix of sea and airlift capabilities are required. Airlift can move lighter forces quickly into theatre while sealift is required to move heavier forces and to sustain deployments.
- SDR studies have shown that our current maritime and air transport forces are inadequate.
- Chartering merchant ships or transport aircraft is an option, but their availability cannot be guaranteed within the very short time scales required. Neither can be relied upon to meet the requirements of our Joint Rapid Reaction Forces.
- We therefore require additional ships and aircraft to meet this capability shortfall.
- **It has been decided that to meet our sealift requirement an additional four roll-on-roll-off container vessels will be acquired, possibly through a Public Private Partnership deal.**
- **For airlift, we will in the short-term acquire four large aircraft, such as C-17s or their equivalent. In the longer term, we also need to consider a suitable replacement for our remaining elderly transport aircraft, for which the proposed Future Large Aircraft is a contender.**
- Bids will be invited to meet our short and long-term air transport requirements in a combined competition.
- To improve the organisation of our strategic lift capabilities, the responsibilities of the Defence Transport and Movements Executive, the Air Movements Executive and the Joint Transport and Movements Staff will be subsumed into a single Defence Transport and Movements organisation with responsibility for land, sea and air movements.

– This increase in our strategic lift capability will enable us to ensure that we have the right assets available to rapidly deploy the forces needed to meet the challenges of the future.



JOINT DEFENCE CENTRE

Joint Doctrine

- Doctrine gives guidance on how our Armed Forces should be deployed, employed and subsequently recovered from operations.
- An accessible and widely understood joint doctrine is essential for the three Services to be capable of operating together effectively.
- The Secretary of State has commissioned a study to examine ways of streamlining the current process of developing joint doctrine in order to improve further the effectiveness of our forces.
- **The study will focus on a proposal to establish a new Joint Defence Centre which would:**
 - **bring the development of joint and single Service doctrine under unified authority;**
 - **ensure that joint doctrine evolves in tune with technology and lessons learned from operational experience;**
 - **be the focus for Britain's contribution to Allied and multinational doctrine;**
 - **develop our contribution to similar work undertaken by NATO, the UN and potential coalition partners, thereby enhancing the aims and objectives of multinationality.**

Strategic Development

- The strategic development process defines the mix of forces that we will need in the future.
- The equipment that we design today and procure tomorrow could still be in service in 30-40

years time. It is therefore essential that we develop Armed Forces which will be capable across a broad spectrum of operations.

- The SDR has identified the need for greater emphasis on strategic development, including a clear vision of the capabilities that we require into the next century. This involves strengthening the process through which policy (what we might do), doctrine (how we might do it), intelligence assessments, scientific and technological advice and financial constraints all interlink to provide:

- a long-term framework within which our shorter term equipment programme can be set,
- better interoperability between the Single Services.

- The establishment of a new Joint Defence Centre will present us with the opportunity to bring together these strands and to provide the Ministry of Defence with a new, joint source of strategic development advice.

The scope of a new Joint Defence Centre

- The study team is assessing options for the scope, size and shape of a new defence centre.

- This is a most important project which signifies our commitment to:

- **increasing the effectiveness of our Armed Forces,**
 - **developing a coherent equipment programme, and**
 - **strengthening the ethos of joint Service cooperation and integration.**
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DEFENCE DIPLOMACY

- Defence Diplomacy is an increasingly important means by which the Armed Forces can act as a force for good in the world, and it is now one of the eight Defence Missions. Its aim is:

'To provide forces to meet the varied activities undertaken by the MOD to dispel hostility, build and maintain trust and assist in the development of democratically accountable armed forces, thereby making a significant contribution to conflict prevention and resolution.'

- It is one of the tools at the MOD's disposal in the spectrum of conflict and crisis prevention, aimed at using our Armed Forces to help shape a more secure and stable world.

- Defence diplomacy does not include operational deployments and is therefore complementary to preventive, coercive and peace support operations as a means of conflict prevention, particularly in Europe.

- There are three Military Tasks (MT) under the Defence Diplomacy Mission:

- Arms control, non-proliferation, and confidence and security building measures (MT16);
- Outreach (advice and assistance to countries of central and Eastern Europe) (MT17);
- Other defence diplomacy activities (MT18).

- Defence diplomacy activities include:

- support to arms control negotiations;
- provision of an arms control implementation organisation (including training for inspections);

- arms control inspections - receiving incoming inspections and conducting outgoing inspections, as well as participation in confidence building measures;
- assistance in weapons destruction programmes;
- provision of Britain's contribution to NATO's Partnership for Peace programme;
- provision of advice and training, in Britain or overseas through short-term training teams and loan service personnel;
- conducting exercises with and visits to friendly countries;
- key aspects of the work of attaché, liaison and exchange posts.

- Defence diplomacy will be one of our main peacetime activities in support of Britain's foreign and security policy objectives. Both military and civilian personnel will be involved.

- It will be a key means of building and maintaining trust and security in a changing and unpredictable world.



THE FUTURE OF THE RESERVES

- **Our Armed Forces rely heavily on the contribution made by the Reserves. In future, they will do so even more. The SDR has confirmed the important roles that Reserve Forces can play as a vital part of Britain's overall defence capability.**

- Reserves (either as individuals or as formed units) must be capable of performing a wide range of tasks to assist our Regular Armed Forces, whether they deploy at short notice to meet a crisis or undertake pre-planned short tours to support a long running peace operation. This support will be provided:
 - by volunteers wherever possible; but if necessary

 - by compulsory mobilisation.

- We will encourage increased use of the new types and categories of reserve service (sponsored reserves, high readiness reserves, full time reserve service and additional duties commitments).

- There will be continuing dialogue with employers to enhance support for the Reserves.

- There will be some new or enhanced roles for reservists, particularly in the Defence Medical Services.

- The TA will see the greatest changes, with its establishment reducing to about 40,000. The findings of the Review are detailed particularly in the fact sheet '[Changes to the TA](#)'. The fact sheets on '[Changes to Army Combat Service Support](#)', the '[Royal Armoured Corps](#)' and '[Defence Medical Services](#)' are also relevant.

- The Royal Naval Reserve will increase in establishment from 3,500 to 3,850, to provide an expanded pool of personnel for use across the fleet.

- The Reserve Air Forces will increase in establishment from 2,650 to 2,920 with new posts in

logistics and other supporting roles.

- The Territorial Auxiliary and Volunteer Reserve Associations (TAVRAs) will continue to support the reserves but some changes will occur (see [separate fact sheet on TAVRAs](#))

- Changes to the Reserve Forces will be planned so as to minimise any disruption to the cadet forces.

- The key to the effectiveness of the Reserves is ensuring that they are ready to do the job required of them in the right timescale. Readiness profiles will be adjusted to reflect operational requirements. Units will have resources sufficient to ensure that they are properly manned and trained and with the right support and equipment.

- As a result our Reserve Forces will be more important, more relevant and will provide their volunteers with better opportunities to continue serving the country in ways that are both meaningful and necessary.



TERRITORIAL, AUXILIARY AND VOLUNTEER RESERVE ASSOCIATIONS (TAVRAS) AND CADETS

TAVRAS

– The TAVRAS are an essential component of the Reserve Forces and Cadets management structure. They provide an important link between society and the Armed Forces by involving local communities in the support for and running of Reserve and Cadet units.

– But the TAVRAS must be kept up to date if they are to provide the Reserve Forces with the support they need. The SDR is therefore making changes to the TAVRA system to reflect:

- the increasing integration of Army regulars and reservists;
- the need to enhance the lines of accountability, responsibility and personal delegated authority.

– The main points are:

- the TAVRA administrative areas will be brought into line with the Army's regional command structure;
- TAVRAS will consequently reduce in number from the present 14;
- funding for the TA and Army Cadet Force executive functions will be delegated through the appropriate local Divisional/District Commander. Budget arrangements for the RN and RAF will be unchanged;
- the TAVRAS, the single Services, the National Employers Liaison Committee, cadet organisations and other interested parties will be consulted throughout the planning and implementation of the reorganisation.

Cadets

- Although cadet organisations have not been specifically included in the scope of the SDR, some of its measures may affect them. Areas of potential impact include the support received by cadets from the Reserve Forces and from local TAVRAs, especially accommodation within TA centres. Where a TA Centre is affected by the Review, alternative arrangements will be made to provide for the cadets.
 - Whilst it is too early to predict what the SDR implementation process will recommend in this area, Ministers have consistently expressed their commitment to what are recognised as major national youth organisations, and have stated that their existence and ethos must be preserved. As part of that commitment, staffs involved in the SDR implementation process have been made aware of the need to safeguard cadets' interests and to ensure that any impact upon them is kept to a minimum. In the meantime, we are planning to make a modest increase in planned expenditure on the cadets.
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CHIEF OF DEFENCE LOGISTICS

- The SDR has emphasised the increasing need for joint operations in the modern world. This shift in emphasis means that defence logistics must be organised to provide increasingly unified support as our front line maritime, ground and air forces work increasingly together.
- Much has been done in recent years to rationalise single service logistics areas and to increase cooperation between the Services. However, our three current logistics systems remain separate and scope exists to improve the delivery of logistic support through more unified arrangements.
- A Chief of Defence Logistics (CDL) will therefore be created to bring together the logistic support areas of all three services to deliver joint support to combat forces. CDL will be a four star military officer whose tasks will be:
 - to develop a unified logistics organisation;
 - to harmonise logistics systems and spread best practice;
 - to develop a common approach to supporting front line forces without diluting the diversity necessary to support operations at sea, on land and in the air;
 - to deliver the benefits of the Smart Procurement Initiative (see [separate fact sheet](#)) within the logistics area;
 - to ensure a common approach to industry in the support area.
- CDL will provide support to front line forces but on a joint, defence-wide basis. The single Service Commanders in Chief will continue to have responsibility for the logistic capability which forms part of our front line forces.
- As the holder of the largest budget in the MOD, CDL will have the authority to act as the

central focus for logistic issues at the highest level.

- The introduction of CDL is a very significant change which will take time to complete. The following steps are currently planned:

- CDL (designate) will be nominated shortly to take charge of an implementation team to complete preparatory work;
- CDL will take up the formal appointment on 1 April 1999, assuming responsibility for the work and financial expenditure of the three existing support organisations (headed by the Chief of Fleet Support, Quartermaster General and Air Member for Logistics), whilst developing plans for a unified organisation;
- From 1 April 1999 CDL will report directly to the Chief of the Defence Staff.

- There is much to be done in developing the CDL concept. Once in post, CDL will examine the detailed way ahead in conjunction with the Chief of Fleet Support, Quarter Master General and Air Member for Logistics, and there will be full consultation as plans develop further.

- The creation of CDL is a change of the greatest strategic significance to defence. It will ensure that our management and delivery of logistics enables us to provide effective support to joint operations in the next century.



DEFENCE LOGISTICS

- **Logistics is a key enabler of military capability, particularly in support of deployed forces. Enhancing our logistic support has been one of the main themes of the SDR.**

- We plan to improve defence logistics capability in both the operational and base support areas.

- For **operational logistics** this will mean:

- increased holdings of some weapons and spares;
- creating additional support units to sustain two concurrent operations using separate lines of communication;
- providing support for deployed air operations at a range of operating bases;
- establishing enhanced joint structures for the control of logistic support in theatre, including the creation of Joint Force Logistic Component Headquarters with integral communication and information systems.

- In the **base support area**, there will be an increasing emphasis on joint or lead-service arrangements. These will include:

- creation of a Chief of Defence Logistics to provide a defence-wide support organisation which can build on recent work to rationalise single Service support areas and maximise cooperation between the Services (this is set out in detail in [a separate fact sheet](#));
- improvements in equipment procurement practices through the implementation of the new processes and procedures identified by the Smart Procurement Initiative;
- greater use of IT to converge processes and systems within the support area;

- a significant reduction in stockholdings and a move to a demand led system, based on the assumption that stocks should only be held when they cannot be regenerated within the readiness time of the forces they are to support;
- creation of defence-wide organisations to provide aircraft repair, storage and distribution, transport and movements and the management of fuels and lubricants for the three Services (see [the separate fact sheet on Defence Agencies](#)).

- In sum, there will be major enhancements in sustainability which, combined with improved strategic lift and an increasingly rationalised and coherent logistics base, will provide the building blocks necessary for the successful support of joint operations into the next century.



DEFENCE MEDICAL SERVICES

- The Armed Forces must be properly supported in the field. A key aspect of this is the provision of timely, modern and effective medical support.
- **Shortfalls in personnel and equipment have reduced the ability of the Defence Medical Services to support substantial deployed operations effectively. The Government has therefore made enhancements to our medical capabilities an important theme in the SDR.**
- **A series of operational enhancements are planned to restore the capability of the Defence Medical Services. These include:**
 - addressing current personnel and equipment shortfalls across all three Services as a matter of priority;
 - procurement of a 200-bed primary casualty receiving ship, with a second one available on contract at longer notice if required;
 - ensuring that an additional 800 field hospital beds are available at a guaranteed higher readiness, along with their appropriate surgical and other support;
 - enhancing the Army's Regular ambulance evacuation capability;
 - establishing a Regular operational medical supply organisation;
 - providing an additional Regular RAF aeromedical evacuation flight and 18 air escort flights;
 - enhancing our capability to provide Regular medical support for deployed operating bases and support helicopters.
- In peacetime, operational military hospital personnel work in the Defence Secondary Care

Agency. Shortfalls in personnel have meant that they are spending too little time at home between operational deployments. And many of those who work closely with the National Health Service have difficulty in maintaining their military training and ethos.

- A further series of enhancements will therefore be targeted specifically at the Defence Secondary Care Agency, including:

- the recruitment of approximately 250 hospital specialists, nurses, technicians and other personnel to bring the Agency up to its establishment;
- renegotiation of the MOD hospital unit contracts with NHS Trusts to allow personnel more time for military activities;
- better access to mess facilities and accommodation for all ranks;
- funding to enable potential recruits to be medically evaluated more quickly by specialists when required;
- enhancement of the community psychiatry service.

- In restoring the capability of the Defence Medical Services, there will be a vital role for medical personnel of the Royal Naval Reserve, the Territorial Army and the Royal Auxiliary Air Force. We will rely increasingly on their skills and dedication, both as volunteers and through compulsory call-up in times of crisis. For example, it is envisaged that a major overseas operation of the scale of the British contribution to operations in the Gulf in 1990/91 would involve the compulsory mobilisation of reserve medical personnel.

- We are committed to restoring operational medical capability to the required level as soon as possible, and a major investment will be made to achieve it. We recognise, however, that recruiting and retention uncertainties mean that in some areas the remedial programme will be a long-term undertaking.



DEFENCE AGENCIES

- 44 defence agencies (plus two candidate agencies) now provide the bulk of defence support. They already employ 30,000 Service personnel and 63,000 civilian staff, as well as contractors, and account for over a quarter of the defence budget.

- The SDR's drive to extend defence-wide approaches will involve some re-organisation of defence agencies in the logistics field.

- This means:

- creating a Defence Aviation Repair Agency (DARA) by 1 April 1999, bringing together all third line aviation repair activity. DARA will later become a trading fund, receiving its funding from departmental and other customers rather than directly from Defence Votes;
- creating a Defence Transport and Movements organisation with responsibility for land, sea and air movements, subsuming the responsibilities of the Defence Transport and Movements Executive, the Air Movements Executive, and the Joint Transport and Movements Staff;
- bringing together all storage, processing and distribution activity into:
 - a Defence Storage and Distribution Agency for non-explosive stores under the Quartermaster General; and
 - a division of the Naval Bases and Supply Agency handling all explosives storage and distribution

By 2004/05, the aim is to establish a single Defence-wide storage and distribution Agency;

- completing studies into the best way of developing the Defence Evaluation and Research Agency's capabilities in conjunction with those of the private sector, and pursuing the concept of a Defence Diversification Agency to encourage transfer of technology to and from industry;

- developing the Procurement Executive as a Defence Agency, as part of the wider reforms of the equipment acquisition organisation;
- completing studies in the other remaining candidate areas for defence agency status, the Army and RAF equipment support organisations.

- These measures will

- produce further efficiencies which, across defence agencies, will be running at a rate significantly higher than the level for the rest of Defence over the next four years;
- make a significant contribution to the spread of activity controlled or run on a defence-wide basis.

- In addition, to achieve yet better quality of performance or lower costs, we will:

- develop more sharply focused methods of measuring and targeting agency performance;
- encourage the spread of best practice through benchmarking projects and the appointment of experienced external members to agency and owners' boards;
- introduce improved approaches to the higher, strategic management of agencies.

- The addition of the Procurement Executive to the list of agency candidates will bring over half the defence budget under the control of defence agencies.

- Agencies are here to stay. They are the cutting edge of the drive for improved management and greater efficiency in defence.



PROCUREMENT EXECUTIVE

- **The Procurement Executive will remain an integral part of the Ministry of Defence with responsibility for procurement of new major equipment as directed by Ministers, the Financial and Management Planning Group and the Equipment Approvals Committee.**
- Project Management, Finance and Contracts and support staff have recently been collocated at Abbey Wood in purpose built accommodation equipped with an up to date IT system.
- While many projects run successfully to time and within budget, others suffer considerable time and cost over-runs and action is needed to remedy this.
- The **Smart Procurement Initiative** produced a package of new tools which recognise that procurement of new equipment is central to the capability of the Armed Forces.
- It also identified the structural changes necessary to take advantage of this approach.
- This work was conducted by mixed teams from MOD, Industry and consultants McKinsey & Co. They went back to first principles and considered whether MOD needs to have a specialist acquisition organisation or could safely leave the whole task to the private sector. Scope was identified for outsourcing more acquisition of routine items (e.g. IT catalogue, general stores) and specific functions; but for complex projects MOD, like other managers of large projects, needs to keep core management in-house while buying in specific skills.
- **Ownership** - various options were considered by Ministers for ownership of the Procurement Executive. The key was to achieve greater clarity in customer/supplier relationships within the rest of MOD, and greater flexibility in personnel matters, whilst not reducing scope for interchanges with the rest of MOD.
 - **Privatisation**, while giving greater access to private sector expertise and incentives, was not seen as a feasible option for an organisation that needed to be close to its military customers and bring together a wide range of interests through the Single Team concept.

- The Procurement Executive already has many of the technical features of an agency and could change status quickly. A key issue was whether the relationship between Ministers reflected in the 'Framework Document' could cover all the complex factors that can affect an individual equipment decision as well as value-for-money.
- Industry saw procurement as an in-house function for MOD.

– **Ministers concluded that the PE should move to agency status in 1999. It is hoped to achieve this by April 1999.**

– This reconfigured PE will have as its heart Integrated Project Teams which will use Smart Procurement tools.

- Core staff for the teams will be drawn from an **Acquisition Stream** bringing together staff involved in the full spectrum of the defence acquisition business process, from the earliest stages of requirement formulation to the final disposal of obsolete equipment. The team will include military officers responsible for operational requirements issues. It would stay intact through a project's life moving to the Logistics area at around the time an equipment enters service.
- The team will have a customer-supplier relationship with a Central Customer, who will define the high-level mission need.
- Fundamental to the support of such an Acquisition Stream will be the definition of a comprehensive set of new processes and functional competences covering the Systems, Procurement and Logistics areas.
- In parallel with this, training courses, (including joint training with industry), staff development schemes, and interchange and secondment programmes will be developed to support the function, and equip staff to meet the needs of the new organisations and processes.

– We anticipate a reduction in PE operating costs of around 20% by 2001/02. Manpower implications have yet to be finalised but will clearly contribute a major element of the planned savings.



CHANGES IN DEFENCE PROCUREMENT

- **MOD has a duty to get value for money for the taxpayer by making sure that its acquisition processes and organisation provide the right equipment, at the right time and for the right price.**
- Unfortunately we do not always get it right. There was a clear need for the SDR to examine the reasons why many major programmes suffer considerable delays and cost over-runs.
- The **Smart Procurement Initiative** was a joint exercise with industry which focused on processes and produced a package of measures which recognise that equipment procurement is a MOD-wide process. An initial exercise identified some new procurement methods:
 - incremental acquisition: by not trying to achieve too much when the equipment is first brought into service, risks are reduced and it can be produced more quickly and more cheaply. Once in service it can be upgraded;
 - putting in more effort early on in projects so they can be planned better and risks reduced;
 - moving to a new partnering arrangement with industry: We now need to work closely with industry to resolve problems, so partnership is now a key theme.
- The Smart Procurement Initiative was the strand of the SDR which looked fundamentally at the MOD's acquisition processes and organisation. Its key elements are:
 - **a single integrated team for each project within MOD**, bringing together all stakeholders and involving industry (except during competition phases) under a team leader able to balance trade-offs between performance, cost and time within boundaries set by the approving authority;
 - **streamlining processes and tailoring them to different types of acquisition.** There would be three tiers:

- **Tier I** - for smaller items and in-service support, good commercial practice will be followed by streamlining, using credit cards or cash for minor purchases. Industry will be relied upon a lot more for support; in some cases the complete operation might be outsourced.
 - **Tier II** - for smaller projects there will be a single integrated team approach including industry, but much will be done to make systems more flexible and less paper-driven with fewer reviews by Committees and more authority devolved to the team leader.
 - **Tier III** - for major projects (including those involving collaboration) we will also use the integrated team approach;
- **making sure that the customer within the MOD is clearly identified at all stages of the project.** This may sound obvious but the MOD's complex approvals systems have often resulted in tortuous and sometimes ineffective relationships between acquisition staff and customers.

- Around these key new ways of doing business - single teams and streamlined processes - some organisational changes are being addressed.

- The main question was whether the MOD needs a specialist acquisition organisation at all. Could we just leave it to industry? The answer was that while scope for outsourcing the acquisition of routine items such as IT and general stores and some specific tasks was identified, it would not be appropriate for us to outsource all acquisition. For complex projects MOD, like the managers of large projects within the private sector, needs to keep core management in-house although it would buy in specialist skills.

- To make sure that these changes actually happen there will be:

- a full-time implementation team including industry and limited consultancy support. This will not be another unnecessary layer of bureaucracy as there is evidence in MOD that such a team will stimulate and promote change;
- development of an acquisition function for both military and civilian staff which would provide core personnel for the integrated project teams. This will be supported by training and personal development and there will be increased interchanges with industry; it should be a two way process with industry people spending time in MOD;
- close definition and monitoring of processes backed by clear performance measures;
- more effort will be focused on the early stages of a project which will have only "candidate" status until the major investment decision;

- a continued Ministerial lead.





MOD HEAD OFFICE

- There will be important changes to the top level budget structure:
 - the VCDS and 2nd PUS Top Level Budgets (TLBs) will be merged into a single centre TLB;
 - the Chief of Joint Operations will become a separate TLB-holder;
 - a range of corporate and personnel services (including a number of joint Service and defence-wide Agencies) will remain in the central TLB, together with the central staff;
 - revised management arrangements will allow better allocation of resources.
- The way in which we manage the forward equipment programme will also change:
 - as a result of the Smart Procurement Initiative, MOD Head Office will assume a more clearly defined role as the "customer" for the defence equipment programme *before* such equipment enters service;
 - equipment capabilities will be "supplied" by new integrated project teams, which will operate under procedures and managerial oversight supplied by the Procurement Executive until the equipment enters service;
 - some staff in the current Head Office equipment systems area will form part of the integrated project teams.
- A new post of Chief of Defence Logistics will be established to maximise the scope for the rationalisation and convergence of defence-wide logistic support.
- A new Joint Defence Centre will be created to develop a joint approach to the development of defence doctrine. It may also take on other tasks. A study into its role and location is under way.

- These are important changes that we believe will make a major improvement in the management of defence.
 - The precise implications will take time to work through but there are likely to be some further reductions in staff levels, to implement the changes and departmental efficiency targets.
 - Head Office in London will eventually be housed in two buildings. The project to refurbish Main Building will not be affected by the SDR.
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DEFENCE ESTATE

- The defence estate is an important defence asset. Its future size will be determined by our changing operational requirements; but any savings we can make help to fund additional military capability.

- As part of the SDR we have therefore conducted a thorough review of our estate holdings, concentrating on the built estate and higher value properties. This has taken into account the changing requirements identified in the SDR and the substantial reductions already in the pipeline.

- In the **London area**:
 - the Duke of York's Headquarters in Chelsea will be sold to the private sector and its occupants re-accommodated as necessary;

 - we plan also to dispose of Millbank Barracks, plus some smaller sites;

 - Chelsea Barracks will be reprovided (not necessarily on its present site) through a public/private partnership project;

 - London headquarters office buildings are now planned to reduce from seven to two (Main Building and Old War Office) by 2004, when Main Building redevelopment is complete;

 - we are drawing up a strategic development plan for London properties (including consideration of future requirements at RAF Northolt and RAF Uxbridge, and other major sites in the Greater London area).

Other major disposal plans now include:

- parts of the Army sites at Chilwell and Woolwich;

- storage and support sites at Didcot, Malvern, Old Dalby, Thatcham and RAF Cardington;
- parts of DERA sites at Bromley, Chertsey (north site) and Farnborough (Queen's Gate);
- office accommodation leases in the Bath area; and
- surplus land at various MOD establishments

- Alternative accommodation will be provided for Service and civilian personnel where necessary. Trade unions have been, or will be, consulted on implications for civilians.

- **Training land.** A shortfall in training land had been identified before the SDR and there is no scope for major reductions at present. The implications of the SDR for military training and rural estate strategy will now be assessed, and we shall seek the views of environmental and conservation bodies on our rural estate strategy.

- As part of this strand of SDR work, we have concluded that more effective central strategic management of the defence estate is needed:

- to ensure maximum value for money for defence; and
- to keep utilisation of the estate under review and identify further opportunities for disposals, the sharing of facilities and the concentration of smaller units when appropriate on larger sites.

Management areas will, however, remain fully accountable for the property that they occupy and for funding it.

- This has been an important part of the SDR, not least in identifying areas in which we can make savings to help fund higher priorities across defence.



POLICY FOR PEOPLE

- **The Government believes that effective defence depends on well-trained, highly skilled and highly motivated people. People issues therefore formed a key part of the SDR, which acknowledged that the needs and expectations of our people have a place alongside the structural and equipment issues that have driven other reviews.**
- **We are committed to well-targeted personnel strategies, and have introduced a series of individual measures to address key areas such as overstretch, undermanning, education, training and development, and welfare.**
- **We will not be able to achieve everything overnight but we are committed to driving these issues forward in the context of a coherent long-term policy for people.**

For Service Personnel

- Overstretch and undermanning feed off each other and produce a vicious circle which is the cause of many of our problems. To deal with them, we will increase the size of the Armed Forces where overstretch is worst and make changes in structure and organisation to spread the load of operational commitments more sensibly. The main changes are:
 - additional logistic support and medical units;
 - formation of a sixth deployable Army brigade;
 - reductions in destroyers and frigates, submarines and combat aircraft while maintaining personnel numbers which will help alleviate short-term gapping in the front-line. We will also ensure that commitments are matched to available resources.

Underpinning these measures is a commitment by all three Services to full manning as their highest priority.

- Giving our people better education benefits them, defence and Britain. We are therefore

launching an important education and training initiative:

- all new entrants to the Armed Forces will have the opportunity to gain the six key skills identified by the Department of Education and Employment as being essential in the workplace (working with other people; effective communication, including written skills; the ability to work with numbers; use of IT; developing earning skills; and problem solving);
- all Service personnel will be given the opportunity to achieve recognised qualifications to S/NVQ Level 2 within three years of joining, or the duration of minimum engagement if longer;
- the value of the Individual Refund Scheme will be increased substantially. We intend that this will become an Individual Learning Account scheme in due course;
- a major new scheme will be introduced to provide funding for training and education after a career in the Services;
- personal development records will be introduced for all Service personnel to provide a record of qualifications and experience gained throughout a career in the Services;
- Service children's education overseas will be enhanced to bring it into line with DfEE initiatives.

– We will also improve welfare arrangements:

- the telephone call allowance for Service personnel on eligible operations will be increased to 10 minutes per week;
- the introduction for all Service personnel of a common leave entitlement in 1999 will entitle all ranks to 30 working days leave per year (the "working days", in this context, are Monday to Friday.)
- Service personnel deployed continuously on eligible operations for more than 10 months will receive an extra rest and recuperation flight;
- existing provision for help and advice for those who have left the Services will be enhanced through the creation of a veterans advice cell.

– These measures are part of a long term strategy. In the longer term:

- there are plans in place to raise the standard of some single living accommodation;
- a Service families task force will be established to address concerns over access to accommodation, education and medical services;
- we intend to introduce a career transition partnership to support those leaving the Armed Forces after more than five years service, and enhanced job finding support will be provided for those who have given between three and five years service;
- work is in hand for the introduction by 1 April 2000 of a new pay structure for the Armed Forces, based on a system of job evaluation;
- a review of compensation arrangements will be undertaken to establish clear criteria for awards and set benefits consistent with the legitimate expectations of Service men and women.

For Civilian Personnel

– The Government recognises the key contribution which civilian staff make to the defence effort and this has been explicitly recognised in the Review, with a corresponding commitment to explain and put into practice improved policies for civilian management.

– Priority Action Areas: The key issues for priority action already identified have been endorsed:

- clearer career information and guidance;
- greater encouragement for professional development and training;
- active promotion of equal opportunities measures and training targeted to achieve results;
- reduced and clearer central regulation and more responsive flexible systems including simpler pay and grading arrangements;
- better upward and downward communication.

– Considerable progress has already been achieved.

– Career information, training and development:

- a manual of career development guidance has been published and will be progressively updated and reinforced;
- investment in training and development has been increased and the infrastructure for delivery expanded and brought up to date with modern technology;
- involvement in interchange and voluntary programmes such as the Princes Trust is being increased;
- support is being extended for an increasing number of staff studying for professional qualifications, including MBAs and schemes for obtaining S/NVQs introduced.

– Equal Opportunities:

- action plans are being implemented covering equal opportunities measures for women, ethnic minority and disabled staff;
- all line managers of civilian staff - Service and Civilian - will undergo appropriate equal opportunities training over the next three years;
- nursery arrangements are available in an increased number of locations. Family friendly policies will continue to be developed through, for example, opportunities for flexible working.
- all personnel management policies and procedures have been reviewed to check that they conform with the requirement of the Disability Discrimination Act.

– Pay and Conditions:

- simpler pay arrangements have been introduced for non-industrial staff and a streamlined and less complex grading structure is being brought in next year;
- terms and conditions for industrial and non-industrial staff will be brought into line where appropriate.

– Investors in People (IiP):

- the IiP programme will ensure that any gaps between the IiP standard and departmental practice are bridged and help to improve communications;
- rigorous independent assessment will ensure policies are put into practice on the ground.

– Reorganisation and Transfer of Work:

- future reorganisation will be based on pragmatism and value for money not dogma;
 - a code of practice will ensure that the fullest attention is given to staff matters for any personnel transferred from the Civil Service.
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IMPACT ON CIVILIAN STAFF

Key Points

- The Government recognises the quality of MOD's civilian staff and that they are a key element of Britain's defence effort. This has been taken fully into account throughout the SDR.
- There will be increasing emphasis on staff development, training and management in accordance with best liP standards, to enable all to acquire the skills, knowledge and experience to achieve their potential wherever they may serve (see the fact sheet on "[Policy for People](#)").
- There is no across-the-board target for post reductions.
- There remains much detailed work to be done. The aim of this fact sheet is to provide you with as much information as possible now. However the figures quoted below are a guide based on the best information currently available. They should **not** be regarded as a final and definitive statement of the impact of the SDR on civilian post numbers.

Background

- The SDR has been policy driven with an emphasis on providing modern, effective and flexible forces. At its centre has been an acknowledgment that the MOD's military and civilian staff are of the highest quality, and a recognition of the need to maintain and motivate this workforce to provide the best possible defence for Britain.

Changes for Civilian Staff

- For civilian staff the longer term impact of the various policy changes is still being assessed in further, more detailed studies. As implications for civilian staff become known, the appropriate Trades Unions will be consulted under the normal procedures and in the new spirit of partnership that has been developing prior to and as a key part of the SDR.

- It is possible to make some estimates of the impact for civilian staff. Compared to previous plans, we currently estimate that the number of civilian staff will reduce by approximately 1,400 over the next four years. We envisage that some 550 Non Regular Permanent Staff appointments will also disappear over the same period. But there is no target for an overall percentage reduction and in some areas there will be increases in civilian posts.

- The bulk of these changes are expected to occur in the following areas:

- **The Procurement Executive:** as a result of the Smart Procurement Initiative the Procurement Executive will run projects using integrated project teams of staff with new acquisition functional competencies. Taken with existing plans we expect that there will be a reduction of up to 650 posts over the next three years.
- **The Logistic Support Area:** both the Smart Procurement Initiative and the creation of a Chief of Defence Logistics will have implications for how functions are carried out and organised in the Principal Administrative Officers' area (the logistics support area). But these changes will take time to work through, in a series of implementation studies.
- **Land Command:** we envisage a major reorganisation of the Army's divisional/district structure in the United Kingdom, which would increase civilian employment in some areas but result in an overall decrease. Proposals have yet to be finalised but they will be subject to the consultation with Trades Unions.
- **Territorial Army:** the TA will reduce to a strength of about 40,000. A manning and career division, creating new posts, will be established in Glasgow to centralise all personnel management for the TA. There will, however, be some post reductions due to the closure of a number of TA centres, on which decisions have yet to be made. There will also be reductions in TAVRA staff (who are Crown Servants) due to the rationalisation of TAVRA regional offices.
- **Naval Support Command:** we estimate that up to 100 posts will be lost due to the closure of storage depots in Rosyth and Colerne in 1999/2000. Further work is in hand to evaluate the impact on staff as a result of the continuing rationalisation of support functions at the Naval Bases;
- **RAF Strike Command:** reductions in the front line force level of Harrier GR7, Jaguar, Tornado GR and F3 aircraft may lead to the loss of up to 18 support posts at the RAF stations affected. These stations have not yet been identified;
- **Duchess of Kent's Hospital, Catterick:** partial closure will take place in 1999 and up to 40 posts will be lost;

- **Changes in the MOD Head Office structure:** the VCDS and 2nd PUS Top Level Budget (TLB) areas will be merged into a central TLB. A new Joint Defence Centre will be created at a location yet to be decided. Most of the civilian staff affected by these changes will be in London and any reductions are expected to be absorbed by natural wastage and reallocation. The Smart Procurement Initiative (see above) will also have implications for the Head Office equipment procurement function. The creation of the new Chief of Defence Logistics may also have implications for Head Office logistics staff in due course.

- Post reductions will be managed as far as possible through reallocation and relocation of staff, natural wastage and seeking volunteers for early retirement. The possibility of compulsory redundancies cannot be ruled out, but these will be kept to the minimum.

- Where staff need to be reassigned and relocated, those posted to a different part of the country will qualify for the existing comprehensive relocation package, which has recently been bench marked as fully competitive with private sector comparators.

- Where we cannot avoid staff being made redundant, they will be fully compensated under the terms of the appropriate regulations. The MOD Outplacement Scheme, which has helped place between 70% and 100% (depending on location) of staff using it over the past six years, will be available to help redundant staff identify new employment opportunities.

The Future

- The MOD will continue to be the largest Government Department in terms of civilian staff and will continue to offer good career prospects for its staff in a broad range of jobs. Many civilian staff will be involved with the implementation of SDR findings and all will play a full part in the delivery of modern defence forces in the post-SDR MOD.



A NEW OPERATIONAL CONCEPT FOR THE NAVY

- The Royal Navy has developed a new concept for maritime forces as a key enabler in joint operations alongside the Army and RAF. It is known as the Maritime Contribution to Joint Operations.

- Under this concept, maritime forces will:
 - play a key role in the new Joint Rapid Reaction Forces;
 - make maximum use of the Navy's inherent mobility and flexibility, together with our ability to deploy early and operate independently of shore support;
 - provide an amphibious force, reinforced when required by Army tanks, armoured vehicles and attack helicopters;
 - deploy joint combat air power from all three Services using fixed wing aircraft and attack and support helicopters;
 - provide, support and defend the sealift vessels required to sustain operations of all kinds;
 - help to deter conflict and forestall crises where possible and;
 - when required, support the movement of land and air forces ashore throughout the subsequent campaign.

- We will achieve this through:
 - a renewed commitment to our amphibious brigade as a highly trained and ready force, with better equipment including armoured all terrain vehicles, heavier artillery and weapon locating radar;

- a major commitment to improved amphibious shipping, including the helicopter carrier HMS OCEAN, roll-on/roll-off ships, landing ships logistic and the two landing platforms dock, HMS ALBION and HMS BULWARK;
 - plans for the procurement of two larger aircraft carriers, able to operate fixed-wing aircraft and the full spectrum of defence helicopters;
 - fitting all attack submarines to be able to operate the Tomahawk land attack missile;
 - continued reliance on modern frigates and destroyers, whose flexibility allows a wide range of employment in operations of all kinds;
 - continuing investment in mine countermeasures to enable us to undertake force projection in littoral waters;
 - a shift of emphasis towards joint training with land and air force units, particularly as part of the new Joint Rapid Reaction Forces.
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NUCLEAR DETERRENT

- The SDR has confirmed that in a changing and uncertain world, Britain continues to require a credible and effective minimum nuclear deterrent based on the Trident submarine force. This has provided Britain's only nuclear system since the withdrawal of the last of the RAF's free-fall nuclear bombs earlier this year, performing both the strategic and sub-strategic role.
- **We will therefore continue to maintain a posture of continuous deterrent patrols with a total force of four Trident ballistic missile submarines. The last Trident submarine, VENGEANCE, will enter service as previously planned around the turn of the century.**
- Our Trident force will continue to be allocated to NATO in both the strategic and sub-strategic roles. It will however remain operationally independent and available for use by the United Kingdom alone in a case of supreme national need.
- But continuing improvements in the overall international environment allow us to maintain our nuclear forces at reduced readiness and to make reductions in warhead numbers.
- **The SDR has concluded that we can maintain a credible deterrent while making the following changes in our nuclear posture:**
 - the single Trident submarine on deterrent patrol at any time will carry 48 warheads (the same number as deployed on each Polaris submarine when they entered service);
 - we will maintain a stockpile of fewer than 200 operationally available warheads;
 - the submarines will routinely be at a "notice to fire" measured in days rather than the few minutes quick reaction alert that we sustained throughout the Cold War;
 - submarines on patrol will carry out a variety of secondary tasks, without compromising their security, including hydrographic data collection, equipment trials and exercises with other vessels;

- we plan over time to reduce to single crews for each submarine, reflecting reduced operational tempo and reducing operating costs.

– We have also taken an initiative to increase openness about our nuclear capabilities by releasing details of our defence stocks of plutonium and highly enriched uranium.

– **In parallel, the Government will press for multilateral negotiations towards mutual, balanced and verifiable reductions in nuclear weapons. British nuclear weapons will be included in such negotiations when the Government is satisfied with verified progress towards the goal of the global elimination of nuclear weapons.**



FUTURE AIRCRAFT CARRIERS

- In the new strategic environment, Britain increasingly needs forces which can act rapidly to prevent, manage or deal with crises globally. For these force projection operations, we require forces with wide utility across a range of military tasks and missions.
- For our forces to be effective they must get to the right place at the right time. But we cannot always be certain that they will have access to air bases on land, particularly in the early stages of a crisis.
- Successive operations in the Gulf and Bosnia have demonstrated that carriers play a key part in peace support, coercion and combat. They offer:
 - a coercive presence which can contribute to conflict prevention (as demonstrated recently in the Gulf);
 - a flexible and rapidly deployable base during operations where airfields are unavailable or while facilities ashore are being established;
 - a range of military options in all littoral operations.
- Our three INVINCIBLE class aircraft carriers were designed for cold war anti-submarine operations and can each carry a maximum of 24 aircraft. The SDR has concluded that the main role for British carriers in future will be to deploy air power, in support of joint operations. This could be in the air defence, land attack or other roles.
- **We therefore plan to replace our current aircraft carriers with two larger vessels in the second decade of the next century. Present thinking suggests that new carriers might be of the order of 30,000 to 40,000 tonnes and capable of carrying up to 50 fixed-wing aircraft and helicopters.**
- The new carriers will operate the future carrier borne aircraft. A range of aircraft options remain open to us, but we shall continue to participate in the concept demonstration phase of

the US Joint Strike Fighter programme, which is a strong contender to meet the requirement.



NAVAL AVIATION

– Naval Aviation will play a key role in the new strategic environment with its inherent flexibility and wide utility across a range of operations.

– This means

- plans for new, larger aircraft carriers, and use of a new range of fixed and rotary wing aircraft for force projection operations;
- new joint organisations and commands to ensure that we make the most operationally effective use of our aircraft.

Fixed Wing Aircraft

– The SDR has endorsed the need for aircraft carriers but the three ships currently in service were designed for Cold War anti-submarine operations. This is less relevant in the new security environment. We therefore plan:

- to replace our current aircraft carriers with two larger vessels in the second decade of the next century. They will be capable of carrying more fixed-wing aircraft than the INVINCIBLE class;
- that the new carriers should operate the future carrier borne aircraft. A range of aircraft options remain open to us, but we shall continue to participate in the concept demonstration phase of the US Joint Strike Fighter programme, which is a strong contender to meet the requirement;

– these new aircraft will be operated by a joint RN/RAF force known as Joint Force 2000 (see [separate fact sheet](#) for details).

Helicopters

– The nature and scale of the submarine threat has changed since the end of the Cold War, with a corresponding change in the type of military response required. The Merlin helicopter remains a vital part of the Navy's future capability, but we will be able to make a reduction in overall numbers compared to earlier plans.

– This means:

- we will not procure further Merlin anti-submarine helicopters beyond the 44 already on order;
- some amendment to the previous Merlin deployment plan. For example, the Sea King Mk 6 helicopters at RNAS Prestwick will not be replaced when they go out of service at a date yet to be decided, and some Type 23 flights planned to be equipped with Merlin will now have Lynx Mk 8s;
- additional Lynx helicopters will be converted to Mk 8 standard to maintain helicopter flights on all operational destroyers and frigates.

– Anti-submarine requirements in the Clyde areas will be reviewed and, when the Sea King Mk6 goes out of service, essential tasks will be carried out by Merlins earmarked from other areas, such as training.

– The number of airborne early warning and commando helicopters are unaffected, although the latter will join with other battlefield helicopters in the Joint Helicopter Command.

Joint Forces

– The SDR has demonstrated the importance of maximising defence operational effectiveness through greater integration of Service capabilities. Two new joint organisations are particularly relevant:

- Joint Force 2000 will initially establish closer links between the Royal Navy Sea Harrier FA2 and RAF Harrier GR7 fleets in anticipation of a commonly operated future carrier based aircraft fleet. It is planned that this will replace both the Sea Harrier FA2 and Harrier GR7 after 2010.
- the Joint Helicopter Command will bring all battlefield helicopters (including Navy commando helicopters, Army attack helicopters and RAF support helicopters) under a single joint command organisation. The Command will help maximise the utility of this very busy helicopter fleet by coordinating tasking, engineering support, spares, stores and training.



COMMANDO BRIGADE AND AMPHIBIOUS SHIPPING

- **Our amphibious capability is a high quality, inherently joint force which plays a key role in both national and NATO plans.**
- The force is flexible, deployable and sustainable, and structured and suited to the needs of the new strategic environment.
- It is able to conduct a range of tasks from humanitarian missions to war fighting.
- It has unrivalled access to littoral areas and does not require any host nation support in order to conduct operations.
- Amphibious forces are key elements upon which the Joint Rapid Reaction Forces (JRRF) may draw and specialised shipping will give the JRRF important extra flexibility.
- Britain is acknowledged as the European leader in amphibious operations and is the natural partner for the United States Marine Corps.
- This means we will:
 - maintain a specialist brigade sized landing force with integral support and armed helicopters, artillery, air defence, engineers and logistic support;
 - continue to invest in improved specialist amphibious shipping, including the landing platform helicopter HMS OCEAN which is planned to enter service early next year, replacement landing platform docks HMS ALBION and BULWARK, and two new landing ship logistics to replace RFAs SIR GERAINT and SIR PERCIVALE, which will be available early in the next century. An additional four roll-on/roll-off container ships will be acquired in the short term;
 - expand the role of the amphibious force as a key element within an enhanced maritime capability in order to conduct and support land operations with the other Services and

Allies;

- make optimum use of our amphibious shipping and equipment by carrying out more training with the other Services.

- The amphibious force will continue to:

- be a key component of Britain's most rapidly deployable forces;
- provide the pivotal element of the UK/Netherlands Amphibious Force, which makes a significant contribution to NATO and within the context of European defence initiatives.

- The need for an amphibious capability has been endorsed by the SDR, and we are committed to ensuring that Britain has a strong and capable amphibious force with which to move into the next century.



ATTACK SUBMARINES

- **The nuclear-powered attack submarine is an extremely potent weapon system with an important role to play in support of a wide range of operations. It is a capability Britain must have in the 21st century. The future of the attack submarine force is therefore assured.**

- Moreover, the introduction of Tomahawk broadens the possible employment of attack submarines. The original fit plan did not include all the Trafalgar class; the SDR has concluded that the whole class should be converted to be able to fire Tomahawk.

- The nature and scale of deployed operations has changed since the end of the Cold War, and we have seen a corresponding shift in the type of military response required. We will retain the full range of capabilities provided by attack submarines, but in the light of our assessment of the forces needed to support Britain's foreign and security policy, and our strategic priorities, we can make a small reduction in the current size of the attack submarine flotilla.

- This means:
 - a staged reduction from 12 to 10 attack submarines, but
 - the order placed last year for the first three Astute class submarines is unaffected, and
 - it is still intended to place an order early next century for two more Astutes.

- The reduction in numbers does not mean an increase in workload. There will be a reduction in peacetime employment to match with the force level reduction and to address programme stretch. This will also take account of a growing requirement for deployment and exercise of Tomahawk capable submarines.

- In addition, manpower released from paying off two submarines will be used to fill gaps ashore within the submarine area.

- The attack submarine Flotilla will be slightly smaller, but with a wider fit of Tomahawk and continued acquisition of the modern Astute class submarines it will remain a potent and effective force at the heart of Britain's defence capability.



DESTROYERS AND FRIGATES

- **The SDR's emphasis on flexible, capable and deployable forces has reinforced the importance of the destroyer and frigate force in the new strategic environment. Destroyers and frigates will therefore continue to be a key component of the Royal Navy, in peace and war.**
- The threat has changed. We no longer face potential enemies with navies on the scale of the Cold War, and open ocean anti-submarine warfare is no longer the primary task it once was.
- But operations in support of crisis management or force projection missions, in NATO or further afield, are often as demanding. We must adapt our forces accordingly. This includes an ability to carry out simultaneous and sometimes prolonged operations in a wide range of maritime environments.
- And we must be able to undertake peacetime tasks without placing undue burdens on destroyer and frigate crews.
- **This means a firm commitment to a modern and effective destroyer and frigate force, including continuing investment in new ships, especially for air defence. In particular:**
 - the last three Type 23s will enter service by 2001;
 - the Type 42s will be replaced by the Horizon multinational Common New Generation Frigate;
 - we will continue to develop a future escort for the even longer term.
- **There will be a small reduction in the overall size of the destroyer and frigate force, from 35 to 32 ships. This will be achieved by paying off six escorts between 1999 and 2001, and replacing them with the last three Type 23s.**
- The smaller force will be able to meet all operational commitments in the new strategic

environment. It must, however, also be able to undertake its peacetime tasks without overstretch. To achieve this:

- manpower released from ships payed off will be used to fill gapped billets elsewhere;
- changes in deployment patterns will involve fewer ships in routine peacetime tasks;
- we will reduce activity levels by changing the way in which we meet our commitments in the Gulf, the West Indies and the South Atlantic.

- The SDR has confirmed a new but demanding future for the destroyer and frigate force as a vital part of Britain's maritime crisis management and power projection capability.



MINE COUNTERMEASURES VESSELS

- **Britain is a world leader in mine countermeasures. Although the scale of the mine threat in home waters is much smaller than during the Cold War, the mine threat to force projection operations, in NATO or further afield, is considerable.**
- HUNT and SANDOWN mine countermeasures vessels therefore have an extremely important role to play. In particular, they will be a key element of force projection in littoral waters.
- We have assessed the size of our mine countermeasures requirements primarily against the needs of force projection operations, including simultaneous and prolonged deployments. But mine countermeasures vessels will also continue to:
 - support the deterrent;
 - support the Civil Power in Northern Ireland;
 - take part in NATO's STANAVFORCHAN;
 - undertake fishery protection duties.
- **As a result we will:**
 - **continue to build up our force of modern and capable HUNT and SANDOWN vessels;**
 - **update both classes in the next decade; but**
 - **increase the current force of 19 vessels to 22, not to 25 as planned earlier.**
- We will achieve this by:

- continuing to accept new SANDOWNS into service;
- paying off three hulls shortly after the turn of the century as the final SANDOWNS are accepted into service. Details of which vessels will be withdrawn will be announced at a later date.

– This programme secures the long term future of the mine countermeasures force as a vital enabler of operations in the changed international environment, and will ensure that Britain remains at the leading edge of mine countermeasures effectiveness.



FISHERY PROTECTION

- **The SDR has confirmed that the Fishery Protection Squadron should continue to carry out tasks on behalf of the Ministry of Agriculture, Fisheries and Food.**

 - It concluded that Royal Navy vessels represented the most effective way of carrying out these tasks. In particular, it recognised the advantages that the Royal Navy brings when it is required to enforce fishery protection regulations or to resolve related harassment incidents at sea. It also recognised the additional benefits that the Squadron provides in search and rescue, providing assistance to Customs and Excise, policing offshore oil and gas installations, and other tasks.

 - **The Scottish Fishery Protection Agency has, however, decided that it no longer requires Royal Navy assistance on fishery protection duties in Scottish waters. The SDR therefore concluded that the Squadron should be reduced by one ship.**

 - As a result:
 - HMS ORKNEY will be payed off at the end of April 1999
 - the five remaining ISLAND Class and one of the CASTLE Class offshore patrol vessels will continue their fishery protection tasks as before, assisted by HUNT Class mine countermeasures vessels.

 - The future of the Squadron will be reviewed as the ISLAND Class vessels approach the end of their lives from 2007 onwards.
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NAVAL SUPPORT

– One of the main aims of the SDR has been to provide the front line with modern and effective support. Key changes which will affect the Naval Support Command (NSC) are:

- the Smart Procurement Initiative;
- the appointment of a Chief of Defence Logistics;
- a review of stockholdings, and changes to arrangements for storage and distribution of stores and ammunition.

– In addition, changes in force levels will impact upon the refit programme.

Smart Procurement Initiative

– Implementation of the new processes and procedures identified by the Smart Procurement Initiative will for the first time unite all relevant design and support expertise into integrated project teams to manage equipment from concept through to end of service, with particular emphasis on through life costs. Work on implementing this is underway. These issues are described in detail in the [Procurement Executive fact sheet](#).

Chief of Defence Logistics

– The SDR concluded that in providing logistics support to the front line, there is a need to build on the strengths of the three single-Service logistics and materiel organisations by:

- taking account of the fact that operations are increasingly conducted on a joint-Service basis; and
- doing things where possible on a functional, defence-wide basis.

– It has therefore been decided that:

- the three single-Service organisations will be brought together into a unified organisation to provide logistic support to all three Services;
- a Chief of Defence Logistics will be appointed to take overall control of the current organisations and re-configure them after an appropriate transition period into one integrated organisation.

– Extensive further work is required to develop these proposals. CDL will also preside over the following changes to:

Stockholdings, Storage and Distribution

– We no longer need to be able to respond at short notice to a massive military threat as we did during the Cold War. We can therefore release resources for other priorities by making savings in this area.

– The scope for major savings, by disposing of surplus stocks and reducing new procurement, has been identified throughout the MOD. A new target of reducing holdings of MOD capital spares by 20% or £2.2 billion has been set over the next three years.

– This initiative, combined with improved business practices, will allow us to make further substantial reductions in the storage and distribution infrastructure. Here too we will be adopting our joint or tri-Service approach where possible.

– A Defence Storage and Distribution Agency (Non-Explosive) will be formed by not later than April 1999. It will be owned by the Quartermaster General. The Agency will be responsible for 3rd and 4th line storage.

– Royal Navy Stores Depots within the Naval Bases will be unaffected. These changes will, however, result in the early closure of the storage depots at Rosyth and Colerne. Full consultation will take place.

– Explosive storage, processing and distribution currently split between the Royal Navy and the Army will be brought together as a division of the Naval Bases and Supply Agency by April 1999.

Logistic Support

– Increased funding will be made available for long lead component refurbishment/purchase to restore our ability to regenerate weapons.

Refit Programme

- The reduction in nuclear submarines, destroyers/frigates and mine countermeasures vessels numbers will, however, lead to a reduction in refitting work at Rosyth and Devonport.
 - A major allocated refit programme for non nuclear work will continue until 2007 at Rosyth and 2001 at Devonport. At Rosyth this will include the major refit of ARK ROYAL, due to start next year.
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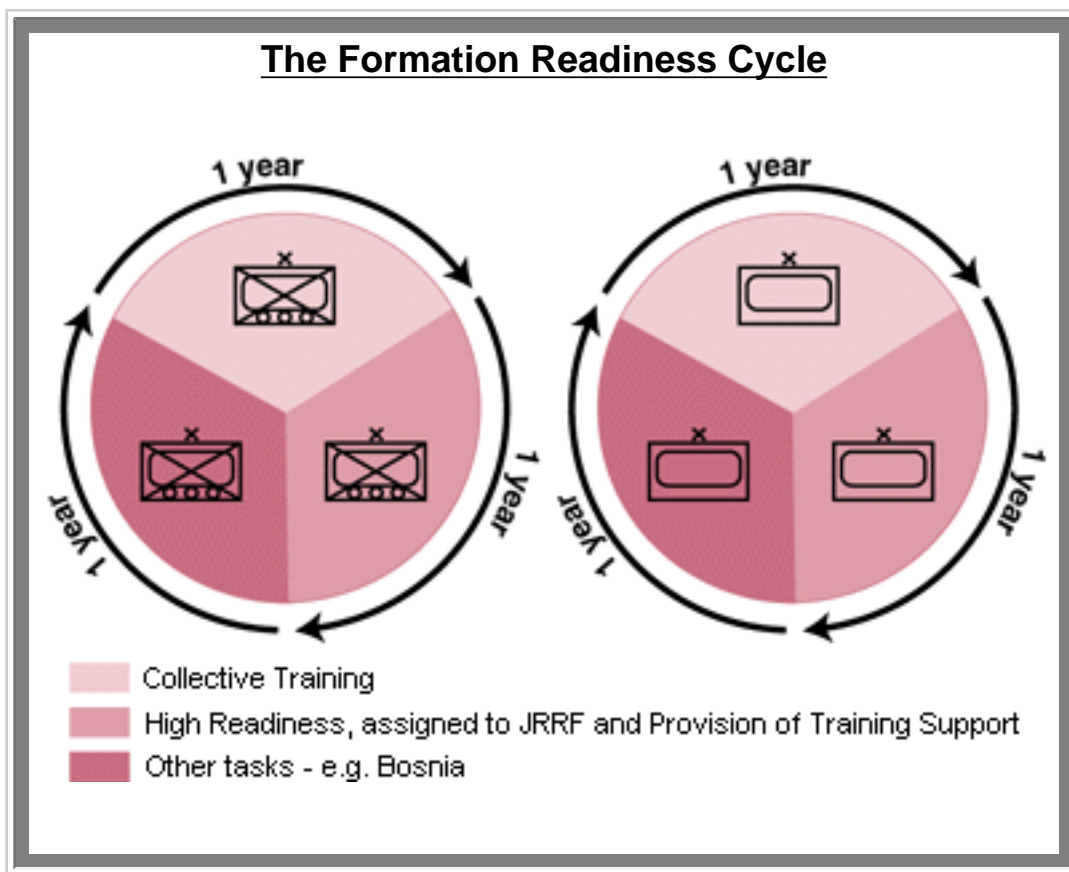
THE POST-SDR STRUCTURE OF DEPLOYABLE DIVISIONS

- The SDR has placed increased emphasis on force projection. This has been reflected in the structure of the Army's two deployable divisions.
- In addition to meeting its permanent commitments in the United Kingdom, Cyprus and elsewhere, the SDR has identified a requirement for the Army to be able to:
 - maintain a brigade deployed indefinitely on a peace keeping mission such as SFOR, and at the same time deploy an armoured or mechanised brigade for warfighting for a period up to six months; or
 - be capable of deploying a warfighting division.
- **The Army's current structure will not meet post-SDR readiness requirements without overstretch. A sixth deployable brigade will therefore be formed and placed in 3(UK) Division.**
- **Divisional Combat Arms Structure Post SDR:**
 - 1(UK)Armoured Division:
 - one armoured reconnaissance regiment within divisional combat support;
 - three armoured brigades each consisting of one armoured regiment with four squadrons and two armoured infantry battalions.
 - 3(UK)Division:
 - three mechanised brigades, each consisting of an armoured regiment with four squadrons, an armoured reconnaissance regiment, an armoured infantry battalion and two mechanised infantry battalions;
 - 5 Airborne Brigade will re-roled to become the third mechanised brigade in 3 (UK) Division. The new formation will be called 12 Mechanised Brigade.
 - 24 Airmobile Brigade: two parachute battalions together with parachute capable command and control, combat support and combat service support, will be

transferred to 24 Airmobile Brigade. They will provide the ability to mount parachute operations at battalion group level.

– **Formation readiness cycle:** this new structure will allow the Army to implement a balanced formation readiness cycle. Brigades will spend a year training, followed by a year at high readiness as part of the Joint Rapid Reaction Forces pool, followed by a year either preparing for, deployed on (for six months) or recovering from peace support operations such as Bosnia. Specifically, the cycle will deliver:

- an armoured or mechanised brigade at high readiness for warfighting
- two brigades annually to meet an indefinite non-warfighting commitment;
- a division of up to three brigades with a choice of capabilities at graduated readiness;
- an armoured and a mechanised brigade able to train coherently within existing resources.



– **Joint Rapid Reaction Forces (JRRF) Requirements:** as well as delivering an armoured or mechanised brigade annually at high readiness for JRRF operations, the six brigade formation readiness cycle will also deliver a range of very high readiness battlegroups: the lead aviation/armoured reconnaissance, lead armoured, and lead parachute/tactical air land operations

battlegroups. The spearhead battlegroup will be an infantry battalion from either 24 Airmobile Brigade, the 3(UK)Division ready brigade or 3 Commando Brigade.

– **Air Manoeuvre Formation:** following the introduction of the Apache attack helicopter, 24 Airmobile Brigade will become the Army's first air manoeuvre brigade. It will consist of three attack helicopter regiments and two airborne infantry battalions together with artillery, engineers and other combat and combat service support. The Brigade will have a battalion-level parachute capability in place of the current brigade-level capability. The precise combined arms structure of the air manoeuvre brigade is the subject of further work.

– **Implementation:** full implementation of the post-SDR structure will not be complete until the Army is recruited to new manpower levels and sustainability shortfalls are met. We intend that the JRRF should be operational in 2001.



JOINT RAPID REACTION FORCES - LAND ASSIGNED FORCES

- **The Joint Rapid Reaction Forces (JRRF) are a pool of readily available forces for short notice deployments. They will comprise all of our higher readiness forces from all three Services.**

- The JRRF will provide force packages up to brigade size in support of Britain's foreign and security policy objectives, including NATO commitments.

- JRRF forces can undertake any mission up to and including modern warfare against the most demanding opposition.

- **The JRRF pool of combat and support forces is configured in two echelons according to readiness:**
 - First Echelon Forces can deploy rapidly to provide our initial capability to respond to a crisis.

 - Second Echelon Forces can provide more substantial capabilities in terms of firepower, tactical mobility and protection, and follow up First Echelon Forces as required.

- **The land component of JRRF First Echelon forces will comprise:**
 - the most readily available 'spearhead forces' to provide an immediate response. The Spearhead Battlegroup is our highest readiness battlegroup and is based on a light infantry battalion or commando group drawn from either 3 Commando Brigade RM, the 'ready brigade' of 3 (UK) Mechanised Division or 24 Airmobile Brigade;

 - lead battlegroups, which can deploy rapidly with integral combat support and logistic support assets. The tactical brigade headquarters of its parent formation may also be required to deploy.

- The lead battlegroups and their supporting forces will be:

- the lead Commando battlegroup, with Lynx TOW and support helicopters, and protected all terrain vehicles, drawn from 3 Commando Brigade Royal Marines;
- the lead parachute/tactical air landing operations battlegroup based on a parachute battalion drawn from 24 Airmobile Brigade;
- the lead aviation/armoured reconnaissance battlegroup with Lynx TOW helicopters, armoured reconnaissance and mechanised infantry sub-units, drawn from the ready brigade of 3 (UK) Division and 24 Airmobile Brigade;
- the lead armoured battlegroup, with two armoured squadrons equipped with Challenger 2 and two armoured infantry companies equipped with Warrior, drawn from 1 (UK) Armoured Division;
- a combat support group, with artillery, electronic warfare, air defence, engineer, nuclear, biological and chemical defence, intelligence, surveillance, target acquisition and reconnaissance, and other assets;
- a combat service support group tailored to activate the line of communications in order to sustain the forces.

- JRRF Second Echelon Forces provide more substantial capabilities to follow up First Echelon Forces as necessary. The composition and readiness of the land elements of the Second Echelon pool is:

- staff and divisional assets from 1 (UK) Armoured Division or 3 (UK) Mechanised Division;
 - JRRF brigades:
 - 3 Commando Brigade, enhanced as necessary with assets from the 3 (UK) Mechanised Division 'ready brigade' to provide a maritime-based, joint landing force suited to theatre;
 - the 'ready brigade' of 3 (UK) Mechanised Division to provide armoured reconnaissance, armoured and mechanised forces;
 - the 'ready brigade' of 1 (UK) Armoured Division to provide armoured forces;
 - 24 Airmobile Brigade to provide aviation and parachuting/tactical air landing operations capabilities;
 - a tailored combat service support group to establish and operate the line of communications in order to sustain the force.
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THE ARMY IN GERMANY

- Basing ground forces in Germany is a key aspect of Britain's defence policy. It:

- provides a visible demonstration of our commitment to NATO;
- provides a similar demonstration of our commitment to NATO's Allied Command Europe Rapid Reaction Corps (ARRC);
- enables us to train and exercise effectively alongside our Allies; and
- enables us to take maximum advantage of the excellent training facilities in Germany and elsewhere in Europe.

- We will therefore continue to base in Germany both 1(UK) Armoured division and its three brigades, and Headquarters ARRC with its Signals Brigade.

- The SDR has, however, examined the balance between forces based in Britain and Germany as part of the Army's wider restructuring. Our aim has been to ensure that we can:

- meet operational commitments;
- train for high intensity warfare;
- be ready to deploy force packages at short notice; and
- reduce overstretch.

- To help achieve these aims and create a better balance between the two deployable divisions, we will withdraw three armoured regiments from Germany, one from each armoured brigade.

- Of these three regiments:

- one will remain equipped with main battle tanks;
- one will become an armoured reconnaissance regiment;
- one will become the Army's contribution to an enhanced joint nuclear, biological and chemical defence capability (see [fact sheet on the Royal Armoured Corps](#)).

- The three armoured regiments still based in Germany will be larger (see [the fact sheet on the Royal Armoured Corps](#)).

- A small number of minor units may also be withdrawn as part of the restructuring process.

- The total number of Army personnel redeployed from Germany will be about 2,500. This will take some years to complete.

- No decisions have yet been taken on which garrisons, regiments or units will be affected.

- Our continued presence in Germany is now established as a fundamental element of British defence into the next century.



ROYAL ARMoured CORPS

- **The Royal Armoured Corps will continue to be a key component of the Army's ground manoeuvre capability in the post- SDR structure.**
- **Armour:** previous plans for the purchase of Challenger 2 have been fully confirmed. The emphasis will therefore be on reconfiguring the Army's armoured capability to maximise its potential in modern warfare whilst maintaining the wide utility of our armoured regiments in other operations.
- **Armoured Reconnaissance:** this will continue to be an essential component of the Army's information and intelligence gathering capability. The driving factor in determining the size and shape of the armoured reconnaissance force has been the need for greater flexibility in responding to emerging crises and the provision of the reconnaissance framework elements of a lead aviation/armoured reconnaissance battlegroup for the Joint Rapid Reaction Forces.
- **Nuclear Biological and Chemical Defence:** the continued proliferation of chemical and biological warfare weapons, and the increased risk of their use by a potential aggressor, has led to a high priority being given to Britain's nuclear, biological and chemical defence capability.

For the Royal Armoured Corps, all this means:

- **a change from eight small to six large armoured regiments.** Each regiment will be reconfigured into a doctrinally robust structure based on four squadrons of 14 tanks. All six of the Army's routinely deployable brigades will be provided with an all-arms capability to enable them to train and deploy with armour;
- **an increase in the number of Regular armoured reconnaissance regiments from three to four** to maintain division level formation reconnaissance requirements, and to provide the high readiness elements needed to support the new JRRF concept;
- **formation of a joint nuclear, biological and chemical defence capability**, the Army component of which will be based on a regular Royal Armoured Corps regiment;

- **maintaining the current buy of 386 Challenger 2** and continuing investment to develop the potential of our armour;
- **continued development of reconnaissance capabilities** as part of the Army's future intelligence, surveillance, target acquisition and reconnaissance architecture and introduction into service of some of the world's most advanced nuclear, biological and chemical detection systems.

We will achieve this by:

- reconfiguring the Royal Armoured Corps current organisation from eight Type 38 armoured regiments to six Type 58s. Three armoured regiments will remain in Germany and three will be based in Britain;
 - as part of a new method of managing the tank fleet known as 'whole fleet management', each armoured regiment will have in regimental lines 30 tanks for peacetime training;
 - this will meet the JRRF's high readiness demands and local training needs. Regiments will be provided with the balance of their tanks for larger scale training and on deployment for operations. It will allow regiments to concentrate on training rather than tank park maintenance and servicing;
 - re-roling one armoured regiment as an armoured reconnaissance regiment, and redistributing Scimitar and Striker accordingly. In the longer term, it is anticipated that these regiments will be equipped with Tracer, and perhaps with complementary unmanned aerial vehicle systems to provide the Army with a balanced information and intelligence gathering capability;
 - transferring the nuclear, biological and chemical defence role from the Territorial Army (TA) to a Regular joint unit, although an element of the TA will continue to provide a Reserve component. The Army element of this joint unit will be provided by a regular Royal Armoured Corps regiment, which is likely to be paired with an armoured regiment in order that it can also provide the Combined Arms Training Centre armoured squadron and allow trickle posting of manpower between roles.
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INFANTRY

- **The SDR has reconfirmed the vital role of the infantry in the new strategic environment. There will be no change to the overall size of the Regular infantry although there will be some re-rolling.**
- The creation of a third mechanised brigade within 3 (UK) Division by re-rolling 5 Airborne Brigade requires an additional armoured infantry battalion and two mechanised infantry battalions.
- Allied to this is the transfer of responsibility for delivering a battalion sized parachute capability to 24 Airmobile Brigade. The two infantry battalions in 24 Brigade will therefore come from the Parachute Regiment.
- **The infantry will retain 40 regular battalions. Changes to roles and capabilities are as follows:**
 - an increase from eight to nine armoured infantry battalions and from four to six mechanised infantry battalions, to allow 5 Airborne Brigade to be re-rolled into a mechanised brigade;
 - replacement of the two airmobile battalions in 24 Airmobile Brigade with two battalions of the Parachute Regiment, which will assume the airmobile role. They will also provide a single battalion-level parachute capability;
 - there is no change to the number of battalions in Northern Ireland, Cyprus and Brunei and for Public Duties;
 - the Allied Command Europe Mobile Force (Land) battalion will no longer be a specific unit. This NATO commitment will be met from the pool of very high readiness units in the Joint Rapid Reaction Forces;
 - the Combined Arms Training Centre battlegroup will fulfil the operational armour delivery

role.

– In addition, the infantry will establish a resident battalion headquarters and headquarters company to meet the UNFICYP commitment in Cyprus. Its sub-units will be provided on a roulement basis from combat and combat support units in their other tasks year within the formation readiness cycle.



ARMY AVIATION

- **Army aviation has been confirmed by the SDR as an increasingly important component of the Army's capabilities.**
 - **There will be no change to the front-line structure or size of Army aviation from that envisaged before SDR.**
 - At present the major units are as follows:
 - two anti-tank (Lynx/TOW) regiments in 24 Airmobile Brigade;
 - a divisional anti-tank regiment in each of 1 (UK) Armoured Division and 3 (UK) Division;
 - a regiment in Northern Ireland.
 - With the introduction into service of the Longbow Apache attack helicopter, this structure will change as follows:
 - three attack helicopter regiments in the air manoeuvre brigade;
 - a single general support (Lynx) regiment in support of both 1 (UK) Armoured Division and 3 (UK) Division;
 - a regiment in Northern Ireland.
 - All deployable Army aviation will come together with the Navy's commando helicopters and the RAF's support helicopters to form the new Joint Helicopter Command. It will have peacetime responsibility for the administration and training of all helicopters that are integral to the land battle.
 - **The Joint Helicopter Command is a major initiative that will maximise the military output of our battlefield helicopters and reinforces their growing importance across the spectrum of military operations.**
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STRATEGIC DEFENCE REVIEW

CHANGES TO REGULAR ARMY COMBAT SUPPORT

- The combat support force structure is integral to delivering the Army's operational output. In the changed international environment it is more important than ever. The SDR has concluded that it requires enhancement so as to be able to:

- deliver a third deployable mechanised brigade within 3 (UK) Division;
- deploy two concurrent lines of communication to separate theatres of operation;
- provide support to the other two Services.

Royal Artillery

- Field Artillery: The total number of units remains the same, but changes to roles and capabilities are required:

- the light gun regiment in 5 Airborne Brigade will be replaced with a sixth AS90 regiment to meet the Brigade's new mechanised role;
- the parachute artillery capability will be met by the light gun regiment in 24 Airmobile Brigade.

- Air Defence: There will be no structural changes to the Army's ground based air defence assets. Training on Rapier Field Standard C will continue to be undertaken on a joint basis at RAF Honington, and a joint headquarters responsible for ground based air defence on a tri-Service basis will be established.

Royal Engineers

- There will be significant enhancements to the Royal Engineers force structure:

- a sixth close support regiment will be formed as part of re-rolling 5 Airborne Brigade into

a mechanised formation;

- a regiment will be formed to support 24 Airmobile Brigade, which is to become the air manoeuvre formation. This will include the Royal Engineers parachute capability;
- two additional air support squadrons will be formed to enhance the Army's ability to provide support to the RAF on deployed operations;
- a fifth regular Engineer logistic squadron and an additional five regular specialist teams Royal Engineers will be formed to help meet the demands of deploying two concurrent lines of communication;
- three nuclear, biological and chemical decontamination cadres are to be formed to act as the basis for a deployed bulk decontamination capability.

Royal Signals

- There will be significant enhancements to the Royal Signals force structure:

- two regular air support squadrons will be added to 21 Signal Regiment to enhance the level of support provided to the RAF's support helicopter force;
 - 5 Airborne Brigade Headquarters and Signals Squadron will re-role as a mechanised squadron;
 - 24 Airmobile Brigade Headquarters and Signals Squadron will be enhanced to deliver a parachute capability and to meet the added demands of commanding attack helicopter regiments;
 - the Strategic Communications Regiment is to be enhanced to support concurrent operations and to provide infrastructure support to deployed Joint Force Headquarters;
 - two combat service support group headquarters and signals squadrons are to be created to provide the communications and headquarters infrastructure for these two deployable headquarters;
 - all armoured and mechanised brigade headquarters and signals squadrons are to be enhanced to be able to undertake prolonged peace-support deployments.
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STRATEGIC DEFENCE REVIEW

CHANGES TO ARMY COMBAT SERVICE SUPPORT

- It is essential for the Army to have capable and deployable combat service support to support force projection operations in the new strategic environment.
- **We need to be able to support two brigade size deployments in separate theatres concurrently. This requires two lines of communication. We cannot at present meet this requirement and there is major overstretch in some Regular combat service support units.**
- **The SDR has therefore sought to strike a better balance between combat, combat support and combat service support capabilities, with the most appropriate mix of Regular and TA elements.**
- This is to be achieved by:
 - an enhancement of around 2,000 additional Regular personnel in the combat support force structure, and
 - piloting the concepts of Sponsored Reserves and Private Sector Logistic Support.

Detail of Changes

- There will be enhancements to logistic command and control:
 - the formation of two fully established combat service support group headquarters and signal squadrons to meet the weaknesses of the current logistic command and control organisation. These will be Regular units and will be based on the existing skeleton Combat Service Support Group Headquarters;
 - additional Royal Signals troops are to be established to provide the strategic communications necessary to support logistic command and control.

- There will also be a number of key changes to the logistics support structure:
 - additional Royal Logistic Corps close support and general support squadrons will be established, each within one of the existing close support and general support regiments. This will allow the deployable brigades to have their affiliated brigade support squadron supporting them throughout the formation readiness cycle;
 - a regiment's worth of bulk water carrying equipment will be procured and a regular bulk water distribution squadron will be established to support the equipment;
 - the following additional units will be established:
 - two postal and courier squadrons;
 - additional Regular local resources, ration and petroleum troops.

This will help alleviate overstretch amongst specialist personnel;

- the Army's Landing Craft Logistic are now no longer required and will be withdrawn from service from 1 April 1999. Further work will be undertaken to ascertain the future requirement for heavy landing craft, including the best mix of the Army's Ramped Craft Logistic and the Royal Navy's Landing Craft Utility.

- There will be a major change to the equipment support structure with the establishment of an additional REME battalion, increasing the number of such battalions from six to seven. This will allow us to provide the support necessary under SDR planning assumptions, and will allow the brigades in the formation readiness cycle to be supported by their affiliated REME battalion.

- There will be a number of key changes in other areas:

- within the engineer support structure, an additional engineer logistic squadron will be established. The package also includes the establishment of a number of Regular specialist teams Royal Engineers to fulfil high readiness requirements and the establishment of sponsored reserve teams for longer notice commitments;
- to meet the requirement for additional Royal Military Police resources to support two lines of communication, an additional Royal Military Police provost company is to be established;
- a centralised pool of Adjutant Generals Corps personnel will be established to allow the formation of field cash and records offices to support operational deployments.

- Finally a pilot project to test the concept of private sector logistic support will be conducted to provide a bakery capability for non-warfighting deployments.

- The majority of the changes to the medical services are considered elsewhere, although it should be noted that the SDR has identified the requirement for:

- the establishment of a Royal Logistics Corps regular ambulance regiment;
- the full establishment of 84 Field Medical Equipment Depot.

- There will be a number of changes to the TA combat service support structure. In most cases these will be reductions and occur where a function has been transferred to the Regular order of battle to meet shorter notice operational commitments. There are also some instances where new capabilities are to be created or where complete capabilities are no longer required due to changes in planning assumptions. The details are as follows:

- an additional two combat service support group support squadrons will be created;
- a railway section will be moved from the Regular Army to the TA;
- four TA transport regiments will be disbanded, although some personnel may be retained for their specialist skills;
- three TA movement control squadrons will be disbanded.

- This package will rebalance and enhance the Army's combat service support order of battle and enable it to provide effective support to the Army on force projection operations.



CHANGES TO THE TERRITORIAL ARMY

– **The SDR has confirmed the important roles that our Reserve Forces can play as a vital component of Britain's overall defence capability. But the requirement is changing and the TA must change as well if it is to have a worthwhile future.**

– The TA must be able to help meet the challenges we face today and could face tomorrow. It must therefore:

- offer utility across all defence missions and military tasks;
- be an integral element of the Army's operational force structure;
- provide both formed units and individual reinforcements.

– **We will be building on success and the unique capabilities that TA personnel bring to defence. But we need to harness their skills and enthusiasm more effectively. The Reserve Forces Act 1996 will help us to do that. It allows much wider use to be made of reservists in the kind of operation we are now likely to conduct. We will, for example, now plan to compulsorily call out:**

- **a significant proportion of the TA to meet a divisional sized warfighting deployment (ie an operation around the size of our contribution to the Gulf War); and**
- **some TA medical forces as part of brigade level deployments**

– TA personnel will continue to be encouraged to volunteer to assist in meeting routine commitments such as Bosnia, where they have made a major contribution.

– Other aspects of the TA's traditional role are no longer a high priority. In particular, the absence of any immediate major threat to British territory means that those elements of the TA currently held to meet this requirement can be reduced.

- However, those elements of the Army that are not required to meet high readiness operational commitments will be held within the TA.
 - The TA will also continue to play a key role in maintaining links between the Armed Forces and society at large.
 - **All of these factors mean that the TA:**
 - **will reduce to an established and manned strength of around 40,000 volunteers;**
 - **will shift its emphasis from combat to combat service support forces.**
 - **will be trained to operate key battle-winning equipment such as Challenger, AS90 and Rapier;**
 - To facilitate this increased reliance on the TA, we need to improve the peacetime management and operational mobilisation of Reserve personnel. This will be done by establishing:
 - a new Reserves Training and Mobilisation Centre to conduct the pre- and post-deployment administration and training of individual TA volunteers and Regular Reserves; and
 - a Reserves Manning and Career Management Division in the Army Personnel Centre, Glasgow, to centralise all personnel management for the TA, bringing it into line with the Regular Army and also providing a single focus for identifying and notifying individuals for mobilisation.
 - Work is being undertaken now to determine the detailed changes to units and TA centres. This will not be complete before the autumn of 1998 and as yet no firm decisions have been reached on the overall order of battle, its locations or the detail of where reductions will be made. But we will make sure that decisions are taken and TA personnel are fully informed as quickly as possible.
 - **The SDR has given the TA a new and more robust role in support of Britain's security and defence policy. Its role in the 21st century will be different but often more important and more demanding, and the new emphasis on force projection will put it closer to the main focus of defence. A rebalanced, relevant, integrated and usable TA will be essential to the Army's operational success.**
-



ARMY DISTRICT ORGANISATION IN THE UK

- The Strategic Defence Review is likely to result in major changes to the Army district organisation in the United Kingdom.

- At present, there are six districts, with headquarters at Aldershot, Bulford, Edinburgh, London, Shrewsbury and York. Among these the headquarters at Bulford is unusual in that it has both regional responsibilities for Army units in south-west England, and operational responsibilities to provide one of the UK's two deployable war fighting divisions - 3 (UK) Division, which has units throughout the country.

- Final decisions on the new structure have not yet been taken. Proposals focus on the following main issues:

- whether we should free Headquarters 3(UK) Division from its regional responsibilities, thus enabling it to concentrate on its operational role;
- who should then carry out Headquarters 3(UK) Division's regional responsibilities, and where they would be based;
- how many districts there should be in the new structure: there will certainly be fewer headquarters each with a larger area of responsibility but no decision has been taken on how many or where the headquarters of the new districts will be based. The aim will be to merge headquarters within one of the existing sites rather than a new location.

- Most of these issues, and the initial proposals for improving and streamlining the headquarters structure, have been widely discussed within Land Command and outside. The Trades Unions have been informed in view of the likelihood of job losses. When decisions are taken there will be further consultation supported by full information on the reasons.



FAST JET COMBAT AIRCRAFT NUMBERS

- Airpower will be a crucial factor in future operations across the crisis spectrum. The emphasis on flexible, deployable high capability forces to support Britain's commitments and responsibilities in a changing and unpredictable world means that the RAF must continue to provide a wide range of modern combat capabilities.
 - Future operations are likely to be diverse and demanding. Most will, however, be smaller than those for which we have planned in the past. Our assessment is that we will be able to achieve the operational scales of effort required in future with slightly fewer front-line combat aircraft and crews than at present.
 - **This will not affect the size of our planned purchase of Eurofighter, but it does enable us to make small reductions in our current fleet.**
 - The front-line offensive support fleet will be reduced by 23 aircraft. This will be achieved by removing 12 Tornado GR, nine Harrier and two Jaguar aircraft from the front-line.
 - the air defence fleet will be reduced by 13 Tornado F3 aircraft. To help compensate for this, we will draw on the staff and aircraft of the Operational Conversion Unit to contribute to the pool of combat ready aircrew to undertake operations.
 - One Tornado F3 Squadron and one Tornado GR1 Squadron will be disbanded as a result.
-

MARITIME FORCE ELEMENTS

Aircraft Carriers

Pre-SDR plan



3

[Agreed post-SDR plan \[1\]](#)



3

Ro-Ro Ships

Pre-SDR plan



2

Agreed post-SDR plan



6

Amphibious Ships

Pre-SDR plan



8

Agreed post-SDR plan



8

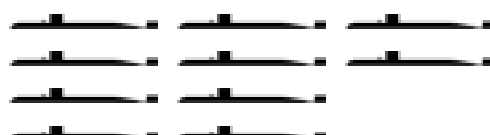
Attack Submarines

Pre-SDR plan



12

[Agreed post-SDR plan \[2\]](#)

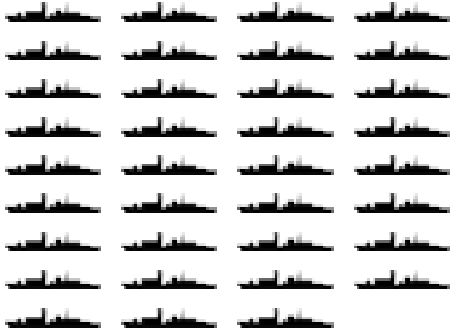


10

Destroyers and Frigates

Pre-SDR plan

35



Agreed post-SDR plan

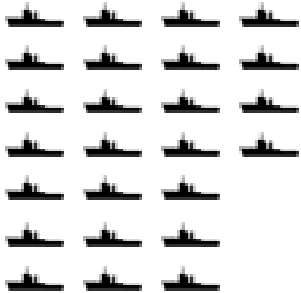
32



Mine Warfare Vessels

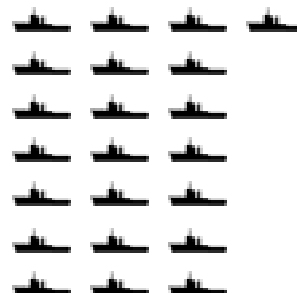
Pre-SDR plan

25



[Agreed post-SDR plan \[3\]](#)

22



RM Commando

Pre-SDR plan

3.5



Agreed post-SDR plan

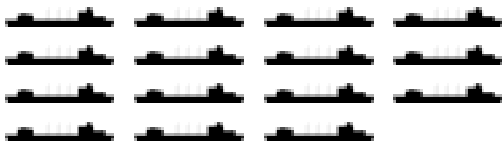
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Royal Fleet Auxiliary Vessels

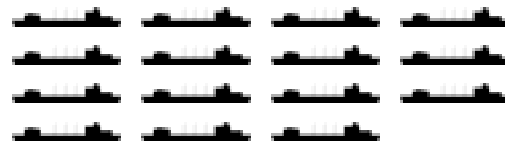
Pre-SDR plan

15



Agreed post-SDR plan

15



Strategic Deterrent Submarines

Pre-SDR plan



4

Agreed post-SDR plan



4

Notes:

1. We plan to replace our current CSVs with two larger aircraft carriers in about 15 years' time.
 2. This will be a staged reduction.
 3. The results of the Strategic Defence Review confirmed a force level of 22 Mine Warfare vessels. The last of these is not planned to enter service until 2000/2001.
-

These tables show only selected force elements.

The symbols used in these tables are illustrative only and are not necessarily indicative of equipment types in use.

LAND FORCE ELEMENTS

Armoured Regiments

Pre-SDR plan



8

Agreed post-SDR plan [\[1\]](#)



6

Reconnaissance Regiments

Pre-SDR plan



3

Agreed post-SDR plan



4

Army Air Corps Regiments

Pre-SDR plan



5

Approved post-SDR plan



5

Artillery Regiments

Pre-SDR plan



15

Approved post-SDR plan



15

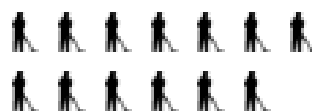
Engineer Regiments

Pre-SDR plan [\[2\]](#)



11

Approved post-SDR plan [\[3\]](#)



13

Equipment Support Battalions (REME)

Pre-SDR plan [\[4\]](#)



6

Approved post-SDR plan [\[5\]](#)



7

Field Hospitals

Pre-SDR plan



3

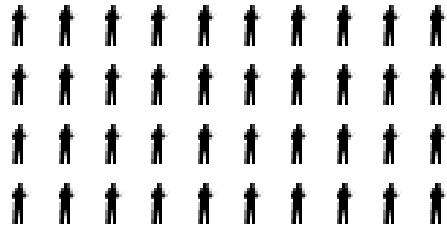
Approved post-SDR plan`



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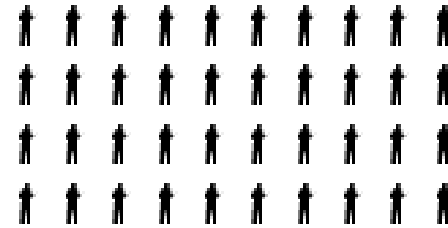
Infantry Battalions

Pre-SDR plan



40

Approved post-SDR plan



40

Joint NBC Defence Unit [\[6\]](#)

Pre-SDR plan

0

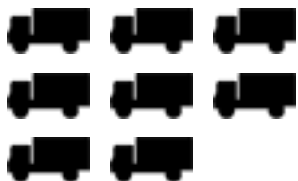
Agreed post-SDR plan



1

Royal Logistics Corps Regiments (Close & General Support) [\[7\]](#)

Pre-SDR plan



8

Agreed post-SDR plan



7

Notes:

1. This change is from eight regiments of 38 tanks each to six regiments of 58 tanks each.
2. 5 x CS Regt, 3 x GS Regt, 1 x EOD Regt, 1 x AS Regt & MWF.
3. 5 x CS Regt, 3 x GS Regt, 1 x EOD Regt, 1 x AS Regt, MWF & 1 x Airmobile Regt.
4. 5 x ES Bn, 1 x NI ES Bn, excludes Avn Bn.
5. 5 x ES Bn, 1 x NI ES Bn, excludes Avn Bn.
6. NBC Regiment was planned to be provided by TA.
7. The RLC Regiments (Close & General Support) force element includes the Logistics Battalions supporting 24 Air Mobile Brigade, 3 Commando Brigade and the resident Regiment in Northern Ireland.

Only Regular Army force elements are shown as the revised structure for the TA has yet to be determined.

These tables show only selected force elements.

The symbols used in these tables are illustrative only and are not necessarily indicative of equipment types in use.

AIR FORCE ELEMENTS

Airborne Early Warning Aircraft

Pre-SDR plan

6



Agreed post-SDR plan

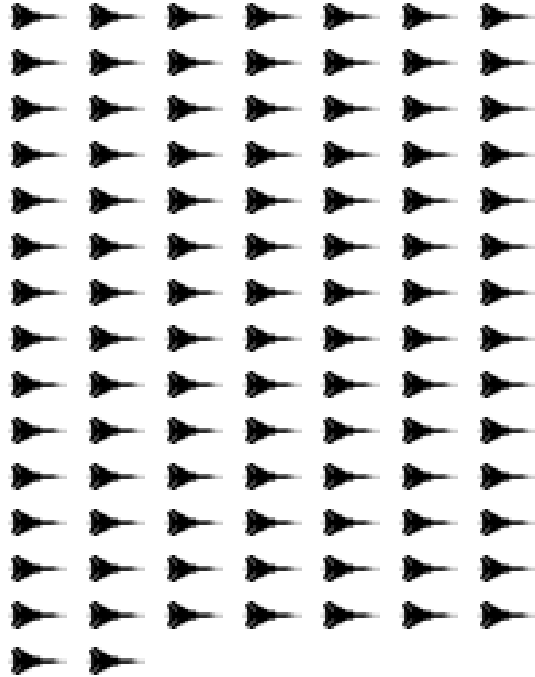
6



Air Defence Aircraft

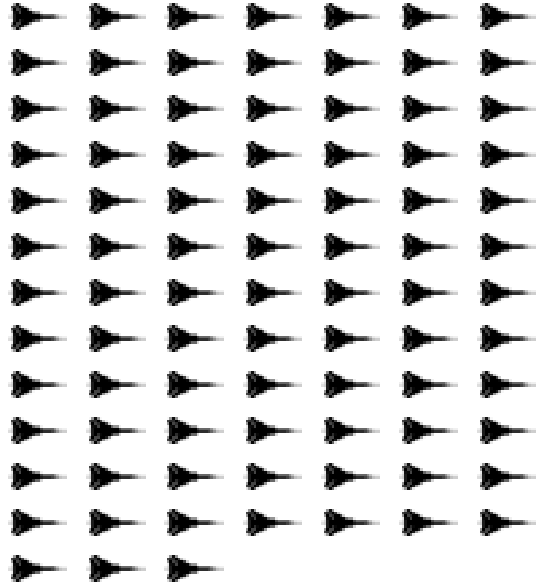
Pre-SDR plan

100



Agreed post-SDR plan

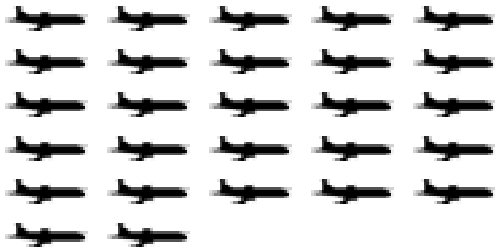
87



Maritime & Recce Aircraft [1]

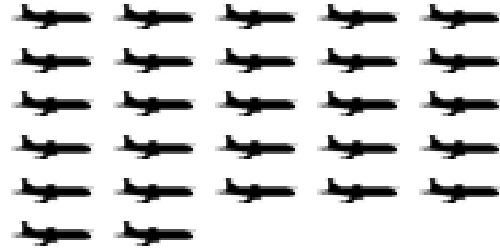
Pre-SDR plan

27



Approved post-SDR plan

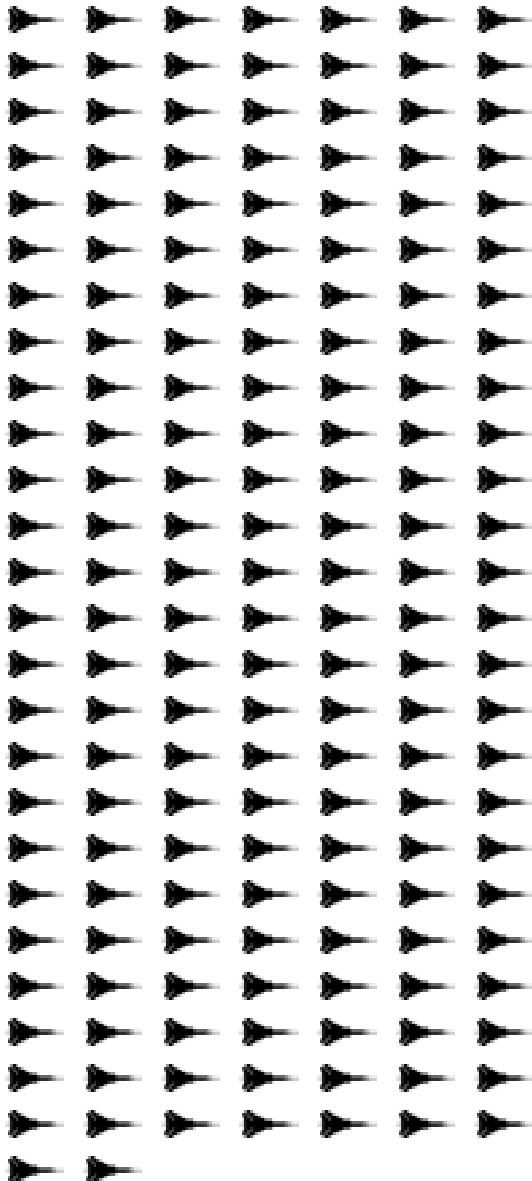
27



Offensive Air Support Aircraft

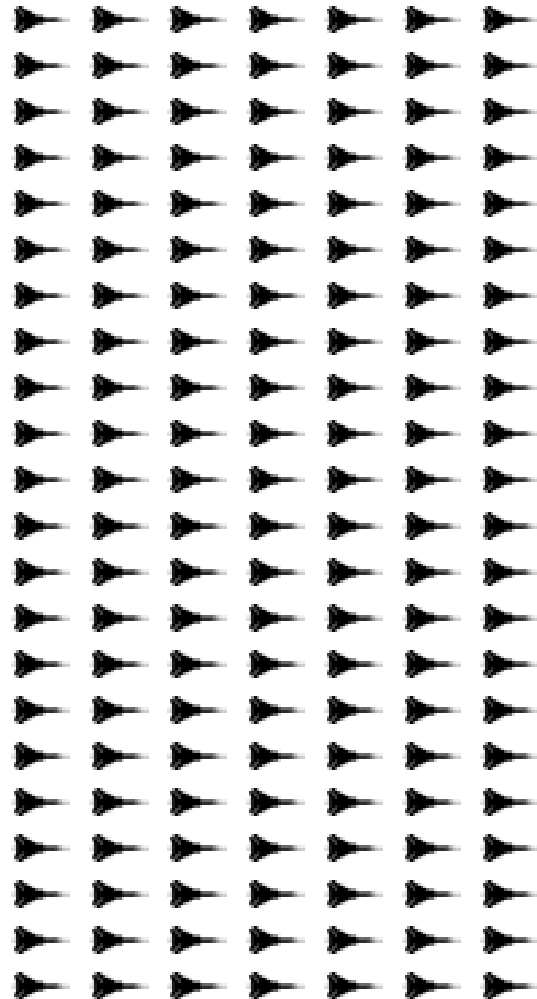
Pre-SDR plan

177



Approved post-SDR plan

154



RAF Regiment Squadrons (Field & Rapier)

Pre-SDR plan



14

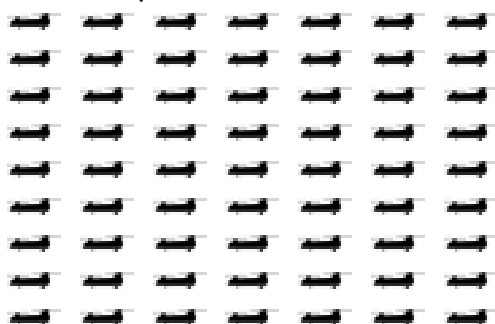
Approved post-SDR plan



13

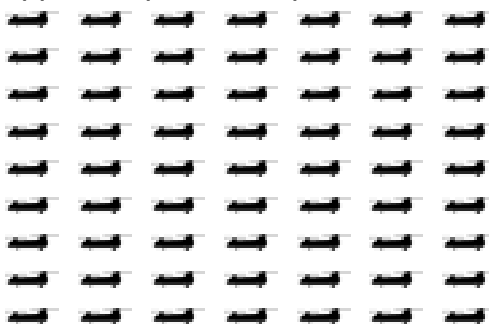
Support Helicopters [\[2\]](#)

Pre-SDR plan



63

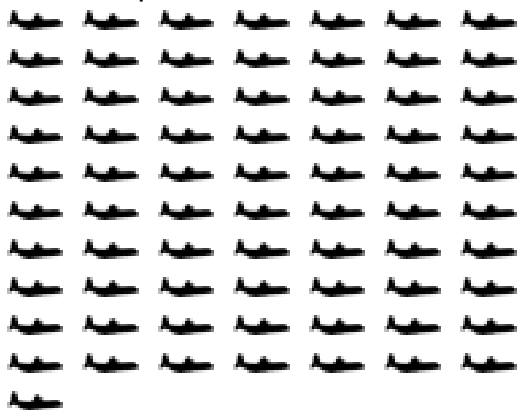
Approved post-SDR plan



63

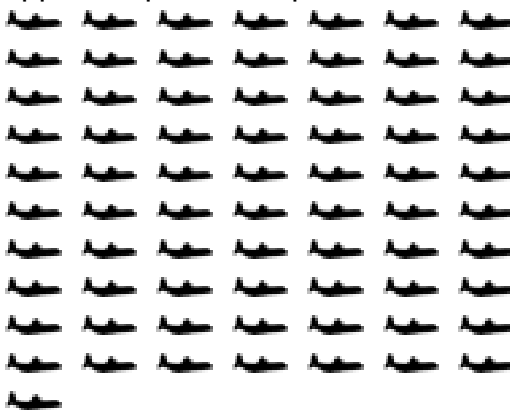
Transport & Tanker Aircraft

Pre-SDR plan



78

Approved post-SDR plan



78

Heavy Airlift

Pre-SDR plan

0

Agreed post-SDR plan

4



Notes:

1. Will reduce to 23 when the Nimrod MRA4 replaces the Nimrod MR2.
2. The support helicopters element covers Puma, Chinook, Sea King 4 and Merlin Mk3 Medium Support helicopters. As these helicopter types vary in terms of range, endurance and carrying capacity, we have expressed all numbers in terms of Chinook equivalents.

These tables show only selected force elements.

The symbols used in these tables are illustrative only and are not necessarily indicative of equipment types in use.



STRATEGIC DEFENCE REVIEW

KEY POINTS

ROBERTSON'S REVIEW: MODERN FORCES FOR THE MODERN WORLD

Press Notice and Key Points of the Strategic Defence Review

Announcing the conclusions of the Strategic Defence Review to the House of Commons today Defence Secretary George Robertson said:

"The Strategic Defence Review has delivered on this Government's promise to provide strong defence for the future. This radical review will modernise and re-shape our Armed Forces to meet the challenges of the 21st century, and give them the firm foundation which they need to plan for the long term.

"The Review has been grounded in foreign policy and sound military experience: it builds on the strengths of our people as well as Britain's long and distinguished military history. It is a mixture of radical change and solid planning fused together through a process of unprecedented open and wide consultation both within and outside the Ministry of Defence. It has the wholehearted support of the Chiefs of Staff.

"We will transform the way in which the Armed Forces do business. New tri-service organisations will take the best from each of the Services and maximise their collective punch. We shall be taking major initiatives to ensure that we recruit the best people from all walks of life, that we get the best from them, and that they benefit from the best of modern employers. We shall ensure that they have the right equipment and training to enable them to do the difficult and dangerous jobs that the country requires of them. And all this while making every pound count.

"The Strategic Defence Review will result in a reduction in the size of our nuclear arsenal together with a re-affirmation of the importance of the nuclear deterrent to the country's security. Our Trident submarines will remain on a continuous patrolling pattern but the number of warheads on each boat will be reduced to 48 from the maximum of 96 announced by the previous Government.

"The Strategic Defence Review will give the country the defence it needs, the Armed Forces

the people they need, and our Service and civilian people the tools they need to do the job.

"This Government is committed to strong defence: and strong defence is sound foreign policy. The Strategic Defence Review will deliver the modern forces for the modern world that will enable Britain to be a force for good in the 21st century."

KEY POINTS

Enhancements in Joint capabilities

Joint Rapid Reaction Forces

Joint RN/RAF fixed wing Force (Joint Force 2000)

Joint Battlefield Helicopter Command

Joint Army/RAF Ground Based Air Defence organisation

Deployable Joint Force Headquarters and greater powers for Chief of Joint Operations.

Joint Defence Centre

New Strategic Lift assets

Plugging the gaps

Improving the capability of the Defence Medical Services

Logistic enhancements

Improved NBC defences

Modernising the Services

Plans to buy two new aircraft carriers

Strengthening amphibious forces

Extending attack submarine TLAM capability

350 additional Royal Naval Reservists

Increasing the number of deployable armoured and mechanised Army Brigades from 5 to 6

Converting 5 Airborne Brigade to a Mechanised Brigade

Converting 24 Airmobile Brigade into a new air manoeuvre brigade

Adding 3,300 troops to Regular Army

Larger, but fewer, tank regiments

Improving TA deployability and usability

Forming a TA Army Mobilisation Centre

Reducing the number of TA held for defence of UK

Confirming the order for Eurofighter

New Missiles for Eurofighter and Tornado

Improvements to Tornado GR4

Improvements to Nimrod R

Modernising the air transport fleet

270 new Air Force Reservists

Making the world a safer place

Defence Diplomacy

Declaring additional forces as potentially available to UN

Further steps on international arms control

Reducing our nuclear deterrent capability to the minimum necessary

Increased openness about our nuclear holdings

Caring for our people and society

Correcting undermanning

"Learning Forces" initiative

Improving operational welfare provision

A new Task Force for Families

Veterans' Advice Cell

Increasing the resources for the Cadet Forces

Making every Pound count

Introducing Smart Procurement

New 4 star Chief of Defence Logistics

A single Defence Transport and Movements Organisation

A new joint Defence Storage and Distribution Agency

Bringing together explosive storage processing and distribution

More active measures to dispose of excess holdings in the defence estate

ENHANCEMENTS IN JOINT CAPABILITIES

Central to enhancing our fighting force will be to harness the skills and capabilities of the Royal Navy, Army and Air Force. A large number of measures are being introduced to allow us to put together, at very short notice, a powerful joint force capable of immediate and, if necessary, simultaneous operations. This means pooling the expertise of the three Services more closely to produce an integrated fighting force, maximising their punch. Key initiatives include:

* The creation of Joint Rapid Reaction Forces to spearhead our modernised, rapidly deployable and better supported front line. These forces - with real punch and protection - will have properly deployable command and control, strategic lift, medical and logistic support, and better arrangements for joint training. We will now be able to mount operations around the size of our largest Bosnia commitment (some 15,000 personnel) at short notice. We will for the first time be able to undertake two of this size of operation at once. The JRRF will be able to conduct operations ranging from evacuation of British citizens, to high intensity conflict.

* In an historic agreement between the Chief of the Naval Staff and the Chief of the Air Staff, a joint RN/RAF fixed wing force, "Joint Force 2000", will operate from both land and our aircraft carriers. This will initially bring together the Sea Harrier FA2 and RAF Harrier GR7 into joint operating packages, but in future the RN and RAF both plan to operate a single, common aircraft from land and sea - the Future Carrier Borne Aircraft. No decision has been taken on the aircraft type, but the US Joint Strike Fighter will be a strong contender.

* A joint helicopter command under a 2-star officer (initially RAF) to bring together all battlefield helicopters, including Navy commando helicopters, Army attack helicopters and RAF support helicopters. This will provide a potent unified force of some 400 helicopters. It will increase flexibility and utility, with the introduction of best practice, and co-ordinated tasking, engineering support, spares, stores and training.

* A joint Army/RAF ground based air defence organisation bringing together the RAF Regiment and Army Rapier surface to air missile units. This new force will enhance the rapid deployability of our forces, making best use of equipment and manpower through full interoperability. No longer will the Army need to wait to be protected by Army Rapier, and the RAF - by RAF Rapier units. The new force will have a joint headquarters and a joint training school building on best Army/RAF practice, with all forces in time using standard equipment and thereby operating as a fully integrated command, sharing air defence tasks in support of all Arms of the Services.

* Significantly enhanced in-theatre command and control of operations by rapidly deployable joint force headquarters; and greater authority and powers for the Chief of Joint Operations at

the Permanent Joint Headquarters, to ensure our forces are fully prepared to fight, and win.

* A new Joint Defence Centre to improve the military effectiveness of our forces by providing a proper focus for the development of doctrine for joint training and operations. This centre of excellence on how forces should deploy and operate to best effect will be available to advise on doctrine for peacekeeping and multinational operations: we hope in time it will provide an international focus for such vital work. It will also bring together effort to look strategically at our future requirements, provide a long-term equipment framework, and better interoperability between the Services.

* Strategic lift to allow a rapid response capability will be enhanced by acquiring 4 more RORO container ships (probably through a PFI deal), giving us 6 in total. This will allow us to deploy our Joint Rapid Reaction Forces, including their heavy armour and protection, at very short notice. In the short term we will also acquire 4 C17 large aircraft or their equivalent. In the longer term we need to consider a suitable replacement for our remaining elderly transport aircraft, for which the proposed FLA is a contender.

PLUGGING THE GAPS

The SDR will also fix the deep problems inherited from the previous Government in the support area, which is the lifeblood of the Forces and without which they cannot fight properly. It will fill in the holes which left our forces dangerously hollowed out, and thereby maximise their prospects for success on operations.

* The capability of our Defence Medical Services will be enhanced. Personnel and equipment shortfalls will be rectified as a matter of urgency, a 200-bed primary casualty receiving ship will be procured (with a second on longer notice), 800 field beds across 4 field hospitals will be brought to higher readiness, the Army's Regular ambulance evacuation capability will be enhanced, and an additional Regular RAF aeromedical evacuation flight and 18 Air Escort Flights (paramedics who care for people in transit to UK and their equipment) will be established. A number of other enhancements will be targeted at the Defence Secondary Care Agency, probably including the recruitment of additional staff, enhancing some of our psychiatric services and speeding patient referrals. Spending will need some time to build up, but is expected to reach around £40M a year by 2000/01, and more thereafter.

* To remedy the weaknesses in logistics left by the last Government and ease overstretch, we plan a package of logistic enhancements extending over several years, with spending peaking at over £100M a year. This will provide additional combat services support taking account of the demanding environments in which we are likely to operate, and the creation of two Joint Force Logistic Component Headquarters to support simultaneous operations. Some 2000 new posts will be created in this area.

* To enhance the ability of our forces to operate in circumstances where they may be threatened by the use of terrifying weapons of mass destruction, we will improve our NBC defences to provide our forces on operations with modern and effective nuclear, biological and chemical defences. These will include an additional buy of integrated biological detection systems and remote sensors; nuclear/chemical reconnaissance systems; building up vaccines and antibiotic packs and decontamination equipment packs. A 400 strong, mainly Regular joint Army/RAF NBC unit will be established to operate these capabilities, able therefore to be able to deploy sufficiently quickly to meet the range of possible operational requirements. We will be enhancing cooperation with allies such as the United States, to ensure we collectively exploit to maximum effect new research and medical breakthroughs.

MODERNISING THE SERVICES

In the post Cold-War world we must be prepared to go to the crisis, rather than having the crisis come to us. Capabilities and equipment will be modernised to provide highly flexible, well-equipped forces able to project power very rapidly to potential troublespots and crises. This means:

FOR THE RN

The emphasis will move from large scale open-ocean warfare to force projection and littoral operations in conjunction with the other two Services, with a premium on versatility and deployability. We will match the front line more closely to today's requirements so that manpower can be used to maximum effect where it is really needed. To that end, we are:

* Planning to procure two large aircraft carriers, capable of operating up to 50 fixed wing aircraft and helicopters from all three services at one time (compared with a maximum of 24 aircraft now), which will give us a new, potent and flexible maritime capability to project power. This will give us a fully independent ability to deploy a powerful combat force to potential troublespots without waiting for basing agreements on other countries' territory. We will be able to be poised in international waters and most effectively back up diplomacy with the threat of force.

* Strengthening support to our brigade-sized amphibious force (5,000 troops), by acquiring an additional 4 RoRo container ships to add to the existing two (Sea Chieftain and Sea Crusader). This is in addition to our new helicopter carrier (HMS Ocean), the two replacement Landing Platforms Dock (Albion and Bulwark) and two replacement Landing Ships Logistic.

* Making all Trafalgar class submarines capable of firing our 1,000 mile range Tomahawk Land Attack Missiles, thereby extending our ability to apply pressure, for example to coerce rogue regimes to comply with international and UN requirements. We have confirmed existing plans to modernise our attack submarine force by purchasing five Astute class; two more will be

ordered early in the new century to join the three already on order.

* Maintaining plans to modernise the destroyer and frigate force with a new class of Common New Generation Frigates.

* Increasing numbers in the Royal Naval Reserve by 350, to 3,850, to provide an expanded pool of personnel to provide additional reinforcements for the Fleet, to enhance operational flexibility. The number of training days in the RN Reserves will be increased from 25 to 35 and for RM Reserve trainees - from 35 to 65.

* Reflecting changed requirements by making small reductions in the size of our attack submarine (12 to 10), surface escort (35 to 32) and mine countermeasure forces (18 to 22 instead of 25). Most of the manpower will be re-deployed to ease overstretch in the front line.

FOR THE ARMY

We will continue to need a full range of capabilities to guard against the spectrum of scenarios we might face. We will modernise the Army for the challenges of the future by focusing on mobility, precision firepower, and protection for our forces. We will:

* Restructure the front line to provide six, not five deployable armoured or mechanised brigades to help reduce overstretch, provide greater flexibility and, together with the formation of the JRRF, the ability to undertake two brigade size operations (one of which could be sustained indefinitely) simultaneously at short notice.

* To achieve this, convert 5 Airborne Brigade - a light brigade which has been shown not to have sufficient hitting power - into a mechanised brigade (12 Mechanised Brigade), by transferring in an armoured infantry and two mechanised infantry Battalions, and the AS90 self-propelled gun, whose awesome firepower has been demonstrated in Bosnia as essential in subduing the warring factions.

* Create a new, powerful air manoeuvre brigade by bringing together, in 24 Airmobile Brigade, the potent attack helicopter and the unique skills of the Parachute Brigade. One parachute battalion will continue to provide an airdrop capability. Three Army Air Corps regiments will be equipped with the formidable Apache attack helicopter from the year 2000.

* Create an additional armoured reconnaissance regiment by re-rolling one of the existing Armoured Regiments brought back from Germany. Information gathering is vital on the battlefield and in peacekeeping operations. To do this better we are examining new technologies for future sensors, reconnaissance land vehicles and unmanned air vehicles. As part of this, we will collaborate with the US in the TRACER/Future Scout and Cavalry System programme.

- * Add 3,300 Regular troops to the Army's numbers, particularly to enhance those trades, such as signals, engineer, medical and logistic troops, which are most heavily committed on operations. This will improve our ability to conduct operations simultaneously, as well as improving quality of life for our most hard-pressed personnel.
- * Make our armoured capability more deployable and effective as a fighting force, by restructuring into 6 larger tank regiments rather than the 8 smaller regiments, with more manpower and tanks in each regiment (58 tanks and 600 personnel by comparison with figures of 38 and 470).
- * Make better use of the tank fleet by keeping only those tanks in the front line that the regiments can use on a day to day basis - 30 out of the 58. As a result our soldiers will spend more time training and less on routine vehicle maintenance.
- * Modernise and enhance the TA to make it more readily deployable and usable - by increasing readiness for operations, including through creating an Army Mobilisation Centre. The TA will be brought to the standard required to undertake demanding and operationally vital tasks at short notice, by enhancing its training and equipment. We will make it more usable through greater use of the powers available under the 1996 Reserve Forces Act: for example to meet a divisional sized warfighting deployment (eg an operation the size of our contribution to the Gulf War) we would plan compulsorily to call out a significant proportion of the TA. The TA will as a result be able to stand proud in the contribution it can make as a force for good in the world. But, because of the vastly reduced threat to the UK, numbers of lightly equipped infantry and yeomanry will be reduced. The size of the TA will reduce from some 57,000 to around 40,000. The implications for TA centres have yet to be determined, and will be done very carefully, in consultation, to ensure that we do not damage, but as far as possible build on existing strong links with society and the community across the country. We are very aware, for example, of the importance that many attach to the historic traditions and ethos of our regiments. We will need to consider very carefully how to ensure that necessary evolution to meet the challenges of the future does not mean that the benefits of tradition are lost to future generations of soldiers. We also want to take into account the availability of training facilities; and the need for close working between Territorial units and the Regular Armed Forces.

FOR THE RAF

Air power will be an ever more crucial ingredient in both warfighting and peace support operations. We shall adjust the emphasis of the Royal Air Force further from defence of the UK airspace against a largely redundant threat, to deploying our aircraft to crises - whether it be for warfighting or a coercive instrument to support political aims. We will also match the size of our front line more closely to today's requirements so that the manpower can be used to maximum effect where it is really needed. We are:

- * Confirming Eurofighter - a world beating aircraft - to provide a step change in the RAF's ability to achieve air superiority and provide air defence for the joint battlefield.
- * Procuring a range of new missiles for the Tornado and Eurofighter to enhance capabilities, such as the BVRAAM (Beyond Visual Range Air to Air Missile), more AMRAAM (Advanced Medium Range Air to Air Missile), the Brimstone advanced anti armour missile, and the Storm Shadow stand off air to surface long range cruise missile.
- * Improving the Tornado GR4 bomber and its deployability - deployment packs to assist rapid deployment on operations, additional support manpower, engine and avionics spares packages; portable engineering and hangar accommodation; and a collision warning system to improve safety for man and machine.
- * Improving the Nimrod-R with the fitting of the Joint Tactical Information Distribution System, to enhance the RAF's reconnaissance capability so vital to both peacekeeping (such as searching out refugees in Eastern Africa) and warfighting operations.
- * Developing the successor to the Tornado GR4: studies continue into a Future Offensive Air System to replace the Tornado GR4 in about 20 years time, looking at cruise missiles and remotely piloted/unmanned air vehicles as well as manned aircraft.
- * Modernising the air transport fleet. In the short term, by acquiring 4 C17 large aircraft or their equivalent. We will continue to look for a suitable replacement for our remaining elderly transport aircraft in the longer term - for which the proposed FLA is a contender.
- * Creating 270 new reservists posts in logistics and other supporting roles so vital to deployments and operations. This will result in an increase in the Reserve Air Forces from 2,650 to 2,920. Readiness profiles will be adjusted to reflect operational requirements, and make the Reserves more usable.
- * Reflecting changed requirements by reducing front line strength by 36 fast jet combat aircraft and disbanding two squadrons. Most of the personnel will be redeployed to ease overstretch in the front line.

MAKING THE WORLD A SAFER PLACE

This Government is determined to be a force for good - to do all it can to help make the world a safer place, through deterring and preventing conflict and crisis:

- * Defence Diplomacy - preventing the conditions which lead to conflict - has been a key theme of the SDR. In recognition of its importance we have made Defence Diplomacy one of the 8 defence missions.

* Defence Diplomacy will include:

An enhanced arms control programme incorporating an improved "Open Skies" capability to monitor arms control agreements and additional training in arms control inspection techniques;

An expansion of the Outreach programme of advice and assistance to countries of central and Eastern Europe, including greater use of attachments and additional training courses. In particular we shall be emphasizing the importance of accountability and the role and value of civilians in defence management;

More education and training initiatives, including the establishment of a Defence Diplomacy scholarship scheme at the Joint Services Command and Staff College and providing extra manpower for short term in country tasks;

We expect to create a number of new Defence Attache posts after we have completed a review into our worldwide requirement, which will look in particular to their key role in defence diplomacy

Other ways of building trust and helping other countries to pull their weight in the international community, such as conducting exercises with and visits to other countries.

* This is a step change in the time and effort we devote to 'Defence Diplomacy' and means that in due course we shall be spending around an additional £15M per annum on these activities.

* We will declare as potentially available to the UN a much larger proportion of our readily available forces (from the Joint Rapid Reaction Forces pool), in recognition of the important role that the UN plays in conflict prevention, to help enhance its capability and clout.

* We will continue to press hard for international progress on arms control. We intend, for example, to develop our capability to verify reductions in nuclear weapons, using AWE expertise.

* For our own part we will maintain only the minimum nuclear deterrence required to deter threats to our vital interests. We have decided:

* to have only one submarine on patrol at any time carrying a reduced load of 48 warheads; half the previous Government's announced ceiling of 96.

- * the submarine on patrol will be at a reduced alert state and will carry out a range of secondary tasks. Its missiles will be detargeted and at several days 'notice to fire', rather than minutes as during the Cold War.
- * we will maintain fewer than 200 operationally available warheads; a one third reduction from the previous Government's plans.
- * we do not need any more than the 58 Trident missile bodies already purchased or ordered. The Royal Navy will not have the final seven missiles planned by the previous Government.

* As a result:

- * the total explosive power of our operationally available weapons will have reduced by over 70% since the end of the Cold War.
- * the explosive power of each Trident submarine will be one third less than that of our Polaris submarines [armed with Chevaline] in recent years.
- * our nuclear holdings will be considerably lower than any other member of the Permanent Five;
- * we are reducing defence holdings of fissile material available for use in nuclear weapons.

* We will be as open as possible about nuclear issues, including our holdings of nuclear materials. We are the first Nuclear Weapons State to declare the size of our defence fissile material stocks:

- * 7.6 tonnes of plutonium, 21.9 tonnes of highly enriched uranium, and

- * 15,000 tonnes of other forms of uranium, of which just over 9,000 tonnes is no longer required for defence purposes and will be placed under EURATOM safeguards and liable to IAEA inspections, as will 4.4 tonnes of plutonium (including 0.3 tonnes of weapons grade material).

CARING FOR OUR PEOPLE AND SOCIETY

People are of crucial importance to effective modern defence. We must recruit and retain the

best people, train and equip them properly for their tasks, and ensure that the demands from them and their families do not become unreasonable. Our policy for people will:

- * Reduce overstretch; by increasing the size of the forces in those skills which are in greatest demand on operations; changing the pattern of deployments such as ships and submarines, so as to reduce routine peacetime tasks and the burden of separation from families; managing Army operational tours better through the restructuring of deployable brigades; and bringing units up to full strength through vigorous recruiting and using the manpower released from the minor reductions in the front line (attack submarines, surface escorts and combat aircraft) to fill existing gaps in other units.
- * Make service careers more attractive; through a major "Learning Forces" initiative - tied into the Government's Lifelong Learning programme. This will help attract young people, provide incentives for them to stay in the forces longer, and - for when they do leave - give them highly transferrable skills in demand in the civilian employment market. The initiative will provide 'Learning Credits' which may be claimed both in service and for some time afterwards.
- * Improve operational welfare provision such as telephone calls home, a common leave entitlement (bringing junior Army and RAF personnel onto a par with their RN colleagues), and giving higher priority to improving the standard of single living accommodation.
- * Establish a dedicated task force for families to address the special problems arising from a mobile lifestyle - such as access to healthcare and school places.
- * Create a special Veterans' advice cell and helpline.

In society at large, recognising the vital link between the services and society, by the injection of an additional £1M per year to support the activities of the Cadets, our nationwide youth movement. Great care will be taken to minimise the impact of changes to the Territorial Army on the Cadets: where a TA Centre is affected by the review, alternative arrangements will be made to provide for the Cadets.

MAKING EVERY POUND COUNT

Every pound spent on defence must count, and be spent wisely and well. In order to free up resources for operational enhancements and to make good inherited weaknesses, the SDR has included a rigorous examination of all our activities and assets, to ensure they are relevant for the future and carried out as efficiently as possible for the taxpayer. This has resulted in:

- * Reductions in those aspects of our capabilities which were needed for the challenges of the Cold War, but which are now less relevant, such as anti-submarine warfare and the direct air and ground defence of the UK. There will accordingly be a reduction of 2 in the number of

attack submarines (from 12); of 3 in the number of surface escort ships (from 35); and the planned increase in the number of mine countermeasures vessels will be limited to 22 rather than 25. We need fewer combat aircraft to meet our commitments and we can therefore reduce the front line. The personnel freed up will be redeployed to fill gaps elsewhere.

* Our Smart Procurement initiative, to eliminate overruns in cost and time, and get equipment faster, cheaper, better. The radical overhaul of our procurement processes will include the introduction of integrated project teams, jointly with industry, to run throughout the life of a project. We will buy equipment on an incremental basis: getting a basic capability quickly into the field and then upgrading as technology moves on.

* A 4-star Chief of Defence Logistics responsible for organising defence logistics so as to best provide for our front line forces as they operate together on joint operations. For example, there will no longer be different supply lines to RAF and RN Harrier aircraft operating as a joint force from our Carriers. The Chief of Defence Logistics (CDL) will spur efficiency and drive through best business practice throughout a unified logistics organisation and in particular strengthen through-life support for equipment.

* A single Defence Transport and Movements organisation with responsibility for all land, sea and air movements. This will streamline and bring together the work now done in three organisations: the Defence Transport and Movements Executive, the Air Movements Executive, and the Joint Transport and Movements organisation, with consequent increase in effectiveness and financial efficiencies.

* A joint Defence Storage and Distribution Agency (Non-Explosive) will be formed by April 1999, to be responsible across the board for 3rd and 4th line storage. It will be owned by the Quartermaster General, and will come under the Chief of Defence Logistics.

* Explosive storage, processing and distribution, currently split between the Royal Navy and Army, will be brought together as a joint division of the Naval Base Support Agency by April 1999.

* We will harness the opportunities offered by a Public Private Partnership to strengthen the Defence Evaluation and Research Agency's ability to continue to provide world class scientific research well into the next century.

* We have looked long and hard at the Defence Estate, focusing particularly on high value sites, especially those in London, to ensure that we keep no more than essential. Our hard scrutiny of our estate has resulted in more than a doubling of anticipated receipts, to around £700M over the next four years. Specific measures include:-

- dispose of the Duke of York's Headquarters in Chelsea (re-

accommodating TA units elsewhere or in the Duke of York's as tenants) and Millbank Barracks;

- continue with PPI to re-provide Chelsea Barracks, not necessarily on its present site;

- dispose of a number of other sites, either fully or partially, around the country, for example parts of the Army sites at Chilwell and Woolwich; storage and support sites at Didcot, Malvern, Old Dalby, Thatcham and RAF Cardington.

- set up a better and tighter central control mechanism for the defence estate which we will use to search actively for disposal opportunities, including through a strategic development plan for London.

* We are determined to make every pound spent on defence count. We instituted a fundamental review of activities and assets as part of the Defence Review. This has proved so successful that we have been able not only to provide for the enhancements necessary to modernise the Armed Forces, but also to make a contribution towards wider Government priorities. The Defence settlement will mean a reduction, in real terms, of £500M in the first year, rising to nearly £700M in the third year, as the efficiencies begin to take greater effect. In sum, a fall of 3% in real terms in the Defence budget by the end of this Parliament. The precise figures are as follows:

	1998/99	1999/00	2000/01	2001/02	1998/99 less 2001/02
CASH (£M)	22240	22295	22830	22987	
98/99 PRICES *CONSTANT	22240	21730	21709	21555	-685
YEAR ON YEAR%		-2.3	-0.1%	-0.7%	-3.1%

*ASSUMING ASSET SALES OF £230M IN 2001/02

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Strategic Defence Review

Background

Launched on 28 May 1997, the Strategic Defence Review set out to determine the future direction of British Defence policy. The resulting White Paper and supporting documentation can be read online.

The following is an archive of background information on the Strategic Defence Review, covering events up to the publication of the White Paper in July 1998.

SPEECHES

- Speech by the Secretary of State for Defence, Mr George Robertson
Chatham House, 12 March 1998
- Speech by Secretary of State for Defence, Mr George Robertson
Royal United Services Institute, London, 18 September 1997

ARTICLES

(These first appeared in FOCUS, the MOD's house journal. They have been edited slightly to clarify acronyms.)

- SDR: Decisions now awaited
FOCUS magazine, April 1998
- Programme emphasises SDR openness
FOCUS magazine, June 1998

SEMINARS

- Summaries of seminars held on 3 and 11 July 1997
- Summary of seminar held on 5 November 1997

PRESS RELEASES

- **14 July 1998**
CSR - investing in strong defence

- **8 July 1998**
Robertson's Review - Modern Forces for a Modern World
- **23 March 1998**
SDR press comment simply speculation - George Robertson
- **19 March 1998**
Expert advisers consider Defence Review themes
- **12 March 1998**
George Robertson reveals Defence Review thinking
- **11 February 1998**
Defence Review - public perceptions
- **15 January 1998**
Strategic Defence Review: consultation continues
- **18 December 1997**
Strategic Defence Review: seminar outcome
- **09 December 1997**
Defence Review: captains of industry consulted
- **25 November 1997**
Defence Review: Robertson seeks cross-party consensus
- **10 November 1997**
Defence Review - Robertson continues consultation process
- **04 November 1997**
Strategic Defence Review: third seminar

- **30 July 1997**

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PARLIAMENTARY

(Links to Hansard on the Parliamentary website)

Debates

- **Strategic Defence Review and The Reserve Forces**
House of Lords, 22 April 1998
- **Strategic Defence Review**
House of Commons, 25 February 1998
- **Defence Policy**
House of Commons, 27 October 1997
- **Defence Policy**
House of Lords, 6 November 1997

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- 22 June 1998
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